

Vadim Lisitsa

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8877756/publications.pdf>

Version: 2024-02-01

68
papers

797
citations

586496

16
h-index

591227

27
g-index

70
all docs

70
docs citations

70
times ranked

461
citing authors

#	ARTICLE	IF	CITATIONS
1	Topology-based characterization of chemically-induced pore space changes using reduction of 3D digital images. <i>Journal of Computational Science</i> , 2022, 58, 101550.	1.5	15
2	Multi-scale reconstruction of porous media from low-resolution core images using conditional generative adversarial networks. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 99, 104411.	2.1	20
3	Numerical dispersion mitigation neural network for seismic modeling. <i>Geophysics</i> , 2022, 87, T237-T249.	1.4	8
4	Dispersion Analysis of Smoothed Particle Hydrodynamics to Study Convergence and Numerical Phenomena at Coarse Resolution. <i>Lecture Notes in Computer Science</i> , 2022, , 184-197.	1.0	1
5	GPU-based algorithm for evaluating the electrical resistivity of digital rocks. <i>Computers and Mathematics With Applications</i> , 2021, 82, 200-211.	1.4	15
6	Formation damage mechanism of a sandstone reservoir based on micro-computed tomography. <i>Advances in Geo-Energy Research</i> , 2021, 5, 25-38.	3.1	12
7	Digital Twins of Geological Objects: Development and Use. <i>Communications in Computer and Information Science</i> , 2021, , 300-311.	0.4	0
8	Numerical Simulation of the Reactive Transport at Pore Scale in 3D. <i>Lecture Notes in Computer Science</i> , 2021, , 375-387.	1.0	1
9	Digital Image Reduction for Analysis of Topological Changes in Pore Space During Chemical Dissolution. <i>Lecture Notes in Computer Science</i> , 2021, , 382-393.	1.0	0
10	Poisson Solver for Upscaling the Physical Properties of Porous Materials. <i>Lecture Notes in Computer Science</i> , 2021, , 532-545.	1.0	0
11	Digital Twins of Hydrocarbon Reservoir. <i>Lecture Notes in Computer Science</i> , 2021, , 675-688.	1.0	0
12	Machine Learning-Based Numerical Dispersion Mitigation in Seismic Modelling. <i>Lecture Notes in Computer Science</i> , 2021, , 34-47.	1.0	5
13	Digital image reduction for the analysis of topological changes in the pore space of rock matrix. <i>Computers and Geotechnics</i> , 2021, 136, 104171.	2.3	6
14	A multi-level parallel algorithm for seismic imaging based on one-way wave equation migration. <i>Computers and Mathematics With Applications</i> , 2021, 97, 344-354.	1.4	2
15	Pore-scale simulation of remaining oil distribution in 3D porous media affected by wettability and capillarity based on volume of fluid method. <i>International Journal of Multiphase Flow</i> , 2021, 143, 103746.	1.6	51
16	Effect of particle content on relative permeabilities in water flooding. <i>Journal of Petroleum Science and Engineering</i> , 2021, 205, 108856.	2.1	6
17	Numerical Algorithm of Seismic Wave Propagation and Seismic Attenuation Estimation in Anisotropic Fractured Porous Fluid-Saturated Media. <i>Lecture Notes in Computer Science</i> , 2021, , 434-448.	1.0	0
18	Numerical Solution of Biot Equations in Quasi-static State. <i>Lecture Notes in Computer Science</i> , 2021, , 519-531.	1.0	2

#	ARTICLE	IF	CITATIONS
19	Influence of interfaces roughness on elastic properties of layered media. Probabilistic Engineering Mechanics, 2021, 66, 103170.	1.3	7
20	Wave Propagation in Fractured-Porous Media with Different Percolation Length of Fracture Systems. Lobachevskii Journal of Mathematics, 2020, 41, 1533-1544.	0.1	7
21	Numerical Simulation of Wave Propagation in 3D Elastic Media with Viscoelastic Formations. Lobachevskii Journal of Mathematics, 2020, 41, 1603-1614.	0.1	4
22	Computational topology-based characterization of pore space changes due to chemical dissolution of rocks. Applied Mathematical Modelling, 2020, 88, 21-37.	2.2	19
23	Attenuation mechanisms in fractured fluid-saturated porous rocks: a numerical modelling study. Geophysical Prospecting, 2019, 67, 935-955.	1.0	32
24	Parallel Algorithm for One-Way Wave Equation Based Migration for Seismic Imaging. Communications in Computer and Information Science, 2019, , 125-135.	0.4	1
25	Sixth-order accurate pseudo-spectral method for solving one-way wave equation. Applied Mathematics and Computation, 2019, 359, 34-51.	1.4	12
26	A Parallel Algorithm for Studying the Ice Cover Impact onto Seismic Waves Propagation in the Shallow Arctic Waters. Communications in Computer and Information Science, 2019, , 3-14.	0.4	0
27	Numerical Estimation of Seismic Wave Attenuation in Fractured Porous Fluid-Saturated Media. Lecture Notes in Computer Science, 2019, , 362-369.	1.0	0
28	Digital twins of multiscale 3D heterogeneous geological objects: 3D simulations and seismic imaging of faults, fractures and caves. Journal of Physics: Conference Series, 2019, 1392, 012051.	0.3	5
29	Statistical analysis of free-surface variability's impact on seismic wavefield. Soil Dynamics and Earthquake Engineering, 2019, 116, 86-95.	1.9	8
30	Numerical simulation of faults formation using the discrete element method. , 2019, , .		2
31	GPU-Based Discrete Element Modeling of Geological Faults. Communications in Computer and Information Science, 2019, , 225-236.	0.4	2
32	Digital Twin of the Seismogeological Object: Building and Application. Communications in Computer and Information Science, 2019, , 214-224.	0.4	0
33	GPU-accelerated discrete element modeling of geological faults. Journal of Physics: Conference Series, 2019, 1392, 012070.	0.3	0
34	Effect of CT image size and resolution on the accuracy of rock property estimates. Journal of Geophysical Research: Solid Earth, 2017, 122, 3635-3647.	1.4	65
35	Numerical study of fracture connectivity response in seismic wavefields. , 2017, , .		4
36	Detection of highly cavernous subseismic zones in carbonate reservoirs by scattered waves. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
37	A two-scale geostatistical approach for elastic properties estimation. , 2017, , .		0
38	Seismic imaging and statistical analysis of fault facies models. Interpretation, 2017, 5, SP71-SP82.	0.5	16
39	Attenuation in Fluid-Saturated Fractured Porous Mediaâ€”Quasi-Static Numerical Upscaling and Wave Propagation Modeling. , 2017, , .		1
40	Correlation analysis of statistical facies fault models. Doklady Earth Sciences, 2017, 473, 477-481.	0.2	5
41	Parallel Algorithm with Modulus Structure for Simulation of Seismic Wave Propagation in 3D Multiscale Multiphysics Media. Lecture Notes in Computer Science, 2017, , 42-57.	1.0	4
42	Simulation of Seismic Waves Propagation in Multiscale Media. Communications in Computer and Information Science, 2017, , 183-193.	0.4	0
43	Scale dependency of pore-space topology and transport properties of sandstone CT scans. , 2016, , .		2
44	Combination of the discontinuous Galerkin method with finite differences for simulation of seismic wave propagation. Journal of Computational Physics, 2016, 311, 142-157.	1.9	45
45	Dispersion analysis of discontinuous Galerkin method on triangular mesh for elastic wave equation. Applied Mathematical Modelling, 2016, 40, 5077-5095.	2.2	25
46	Influence of surface topography variation on repeatability of buried receiver data in desert environment. , 2015, , .		2
47	Fracture Orientation and Fluid Saturation of a Cavernous-Fractured Reservoir Via Imaging of the Scattering Energy. , 2015, , .		0
48	Local timeâ€”space mesh refinement for simulation of elastic wave propagation in multi-scale media. Journal of Computational Physics, 2015, 281, 669-689.	1.9	40
49	Numerical study of the interface errors of finite-difference simulations of seismic waves. Geophysics, 2014, 79, T219-T232.	1.4	59
50	Numerical experiments and field study of impact of fluid saturation of cavernous-fractured reservoirs of East Siberia to scattered waves. , 2014, , .		0
51	Simulation of seismic wave propagation in models with complex free-surface and sea-bed topographies based on the coupling of discontinuous Galerkin method and finite differences. , 2014, , .		0
52	Finite difference simulation of elastic wave propagation through 3D heterogeneous multiscale media based on locally refined grids. Numerical Analysis and Applications, 2013, 6, 40-48.	0.2	4
53	Numerical simulation of seismic wave propagation in models with complex intrusions: Anisotropy, attenuation, small-scale heterogeneities. , 2013, , .		0
54	Numerical simulation of seismic waves in models with anisotropic formations: coupling Virieux and Lebedev finite-difference schemes. Computational Geosciences, 2012, 16, 1135-1152.	1.2	20

#	ARTICLE	IF	CITATIONS
55	Application of M-PML absorbing boundary conditions to the numerical simulation of wave propagation in anisotropic media. Part II: Stability. Numerical Analysis and Applications, 2012, 5, 36-44.	0.2	12
56	Efficient finite-difference multi-scheme approach to the simulation of seismic waves in anisotropic media. Numerical Analysis and Applications, 2012, 5, 144-149.	0.2	0
57	Finite-difference algorithm with local time-space grid refinement for simulation of waves. Computational Geosciences, 2012, 16, 39-54.	1.2	18
58	Simulation of Seismic Waves Propagation in Multiscale Media: Impact of Cavernous/Fractured Reservoirs. Lecture Notes in Computer Science, 2012, , 54-64.	1.0	11
59	Application of M-PML reflectionless boundary conditions to the numerical simulation of wave propagation in anisotropic media. Part I: Reflectivity. Numerical Analysis and Applications, 2011, 4, 271-280.	0.2	19
60	On specific features of the Lebedev scheme in simulating elastic wave propagation in anisotropic media. Numerical Analysis and Applications, 2011, 4, 125-135.	0.2	16
61	Accuracy analysis of finite-difference staggered-grid numerical schemes for elastic and fluid-elastic interfaces. , 2010, , .		1
62	On the interface error analysis for finite difference wave simulation. Computational Geosciences, 2010, 14, 769-778.	1.2	41
63	Reflectionless truncation of target area for axially symmetric anisotropic elasticity. Journal of Computational and Applied Mathematics, 2010, 234, 1803-1809.	1.1	7
64	Lebedev scheme for the numerical simulation of wave propagation in 3D anisotropic elasticity. Geophysical Prospecting, 2010, 58, 619-635.	1.0	123
65	Accurate numerical simulation of sonic logging in arbitrary anisotropic viscoelastic media. , 2010, , .		4
66	Traveltime and Reflection Coefficients Accuracy of Staggered-grid Finite-difference Simulation of Seismic Waves. , 2010, , .		2
67	Local Time-Space Mesh Refinement for Finite Difference Simulation of Waves. , 2010, , 609-616.		0
68	Lebedev Schemes for Elastic Anisotropic Problems. , 2007, , .		7