Loukas F Kallivokas

List of Publications by Year
in descending order

46	775	623734	526287
papers	citations	14 h-index	27 g-index

47	47	47	330
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Site characterization using full waveform inversion. Soil Dynamics and Earthquake Engineering, 2013, 47, 62-82.	3.8	81
2	Timeâ€domain hybrid formulations for wave simulations in threeâ€dimensional PMLâ€truncated heterogeneous media. International Journal for Numerical Methods in Engineering, 2015, 101, 165-198.	2.8	72
3	Seismic wave amplification by topographic features: A parametric study. Soil Dynamics and Earthquake Engineering, 2017, 92, 503-527.	3.8	62
4	A symmetric hybrid formulation for transient wave simulations in PML-truncated heterogeneous media. Wave Motion, 2013, 50, 57-79.	2.0	56
5	Full-waveform inversion in three-dimensional PML-truncated elastic media. Computer Methods in Applied Mechanics and Engineering, 2015, 296, 39-72.	6.6	51
6	Three-dimensional P- and S-wave velocity profiling of geotechnical sites using full-waveform inversion driven by field data. Soil Dynamics and Earthquake Engineering, 2016, 87, 63-81.	3.8	51
7	Symmetric Local Absorbing Boundaries in Time and Space. Journal of Engineering Mechanics - ASCE, 1991, 117, 2027-2048.	2.9	30
8	Mixed unsplit-field perfectly matched layers for transient simulations of scalar waves in heterogeneous domains. Computational Geosciences, 2010, 14, 623-648.	2.4	29
9	The inverse medium problem in heterogeneous PML-truncated domains using scalar probing waves. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 265-283.	6.6	28
10	Timeâ€domain analysis of transient structural acoustics problems based on the finite element method and a novel absorbing boundary element. Journal of the Acoustical Society of America, 1993, 94, 3480-3492.	1.1	24
11	A simple impedance-infinite element for the finite element solution of the three-dimensional wave equation in unbounded domains. Computer Methods in Applied Mechanics and Engineering, 1997, 147, 235-262.	6.6	23
12	The inverse medium problem in 1D PML-truncated heterogeneous semi-infinite domains. Inverse Problems in Science and Engineering, 2010, 18, 759-786.	1.2	21
13	Model dimensionality effects on the amplification of seismic waves. Soil Dynamics and Earthquake Engineering, 2018, 113, 572-592.	3.8	18
14	Inverse metamaterial design for controlling band gaps in scalar wave problems. Wave Motion, 2019, 88, 85-105.	2.0	18
15	NEAR-SURFACE LOCALIZATION AND SHAPE IDENTIFICATION OF A SCATTERER EMBEDDED IN A HALFPLANE USING SCALAR WAVES. Journal of Computational Acoustics, 2009, 17, 277-308.	1.0	14
16	Non-convolutional second-order complex-frequency-shifted perfectly matched layers for transient elastic wave propagation. Computer Methods in Applied Mechanics and Engineering, 2021, 377, 113704.	6.6	14
17	Stable localized symmetric integral equation method for acoustic scattering problems. Journal of the Acoustical Society of America, 1992, 91, 2510-2518.	1.1	12
18	Inverse band gap design of elastic metamaterials for P and SV wave control. Computer Methods in Applied Mechanics and Engineering, 2020, 370, 113263.	6.6	12

#	Article	IF	Citations
19	On the feasibility of inducing oil mobilization in existing reservoirs via wellbore harmonic fluid action. Journal of Petroleum Science and Engineering, 2011, 76, 116-123.	4.2	11
20	Wave energy focusing to subsurface poroelastic formations to promote oil mobilization. Geophysical Journal International, 2015, 202, 119-141.	2.4	11
21	On an inverse source problem for enhanced oil recovery by wave motion maximization in reservoirs. Computational Geosciences, 2015, 19, 233-256.	2.4	11
22	Local absorbing boundaries of elliptical shape for scalar waves. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 4979-5015.	6.6	10
23	Optimization of sources for focusing wave energy in targeted formations. Journal of Geophysics and Engineering, 2010, 7, 242-256.	1.4	10
24	A framework for assessing the uncertainty in wave energy delivery to targeted subsurface formations. Journal of Applied Geophysics, 2016, 125, 26-36.	2.1	10
25	Time-domain forward and inverse modeling of lossy soils with frequency-independent Q for near-surface applications. Soil Dynamics and Earthquake Engineering, 2012, 43, 139-159.	3.8	9
26	Parameter Estimation in Layered Media Using Dispersion-Constrained Inversion. Journal of Engineering Mechanics - ASCE, 2018, 144, .	2.9	9
27	On the full-waveform inversion of LamÃ© parameters in semi-infinite solids in plane strain. International Journal of Solids and Structures, 2019, 164, 104-119.	2.7	9
28	Maximization of Oil Mobility within a Hydrocarbon Reservoir for Elastic Wave-based Enhanced Oil Recovery. , 2011, , .		8
29	A comparison of time-reversal and inverse-source methods for the optimal delivery of wave energy to subsurface targets. Wave Motion, 2016, 67, 121-140.	2.0	8
30	Group Velocityâ€“Driven Inverse Metamaterial Design. Journal of Engineering Mechanics - ASCE, 2019, 145, 04019094.	2.9	8
31	Local absorbing boundaries of elliptical shape for scalar wave propagation in a half-plane. Finite Elements in Analysis and Design, 2004, 40, 2063-2084.	3.2	7
32	The inverse medium problem for Timoshenko beams and frames: damage detection and profile reconstruction in the time-domain. Computational Mechanics, 2011, 47, 117-136.	4.0	7
33	Direct time-domain soil profile reconstruction for one-dimensional semi-infinite domains. Soil Dynamics and Earthquake Engineering, 2009, 29, 1016-1026.	3.8	5
34	Hybrid perfectly-matched-layers for transient simulation of scalar elastic waves. Structural Engineering and Mechanics, 2014, 51, 685-705.	1.0	5
35	Estimation of Oil Production Rates in Reservoirs Exposed to Focused Vibrational Energy. , 2014, , .		4
36	Partial-differential-equation-constrained amplitude-based shape detection in inverse acoustic scattering. Computational Mechanics, 2007, 41, 579-594.	4.0	3

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37	On the inverse problem of soil profile reconstruction: a comparison of time-domain approaches. Computational Mechanics, 2008, 42, 921-942.	4.0	3
38	Bayesian Inversion of Heterogeneous Media: Introducing the Next Generation of Integrated Studies for Offshore Site Investigations. , 2013, , .		3
39	Source parameter inversion for wave energy focusing to a target inclusion embedded in a threeâ€dimensional heterogeneous halfspace. International Journal for Numerical and Analytical Methods in Geomechanics, 2017, 41, 1016-1037.	3.3	3
40	Resolution improving filter for time-reversal (TR) with a switching TR mirror in a halfspace. Journal of the Acoustical Society of America, 2019, 145, 2328-2336.	1.1	2
41	An Extension of the Mobility Analysis of the Impulse Response Method for Coupled Pile-soil Integrity Testing. Journal of Earthquake Engineering, 2022, 26, 3703-3723.	2.5	1
42	Ellipsoidally-shaped local absorbing boundaries for three-dimensional scalar wave propagation. Computational Mechanics, 2004, 35, 11-23.	4.0	0
43	Assessment of a fictitious domain method for patient-specific biomechanical modelling of press-fit orthopaedic implantation. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 501-516.	1.6	0
44	A mixed symmetric BEM for multi-domain, multi-material and crack interface problems in elastostatics. WIT Transactions on State-of-the-art in Science and Engineering, 2010, , 349-363.	0.0	0
45	Greenâ€™s analysis of conducting lattices. Journal of Engineering Mathematics, 2022, 132, 1.	1.2	0
46	The inverse problem for conducting defective lattices. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114788.	6.6	0