Chrysoula Tsogka

List of Publications by Year
in descending order

77 papers	2,209 citations	393982 19 h-index	223531 46 g-index
85 all docs	85 docs citations	85 times ranked	1212 citing authors

#	ARTICLE	IF	CITATIONS
1	Application of the perfectly matched absorbing layer model to the linear elastodynamic problem in anisotropic heterogeneous media. Geophysics, 2001, 66, 294-307.	1.4	665
2	Imaging and time reversal in random media. Inverse Problems, 2002, 18, 1247-1279.	1.0	241
3	An Analysis of New Mixed Finite Elements for the Approximation of Wave Propagation Problems. SIAM Journal on Numerical Analysis, 2000, 37, 1053-1084.	1.1	117
4	Interferometric array imaging in clutter. Inverse Problems, 2005, 21, 1419-1460.	1.0	98
5	Theory and applications of time reversal and interferometric imaging. Inverse Problems, 2003, 19, S139-S164.	1.0	95
6	Adaptive interferometric imaging in clutter and optimal illumination. Inverse Problems, 2006, 22, 1405-1436.	1.0	89
7	Simulation of seismic response in an idealized city. Soil Dynamics and Earthquake Engineering, 2003, 23, 391-402.	1.9	66
8	A New Family of Mixed Finite Elements for the Linear Elastodynamic Problem. SIAM Journal on Numerical Analysis, 2002, 39, 2109-2132.	1.1	65
9	Statistically stable ultrasonic imaging in random media. Journal of the Acoustical Society of America, 2002, 112, 1509-1522.	0.5	58
10	Coherent interferometric imaging in clutter. Geophysics, 2006, 71, SI165-SI175.	1.4	52
11	FICTITIOUS DOMAINS, MIXED FINITE ELEMENTS AND PERFECTLY MATCHED LAYERS FOR 2-D ELASTIC WAVE PROPAGATION. Journal of Computational Acoustics, 2001, 09, 1175-1201.	1.0	47
12	The Stretching Method for Vibration–Based Structural Health Monitoring of Civil Structures. Computer-Aided Civil and Infrastructure Engineering, 2017, 32, 288-303.	6.3	42
13	Time reversal imaging for sensor networks with optimal compensation in time. Journal of the Acoustical Society of America, 2007, 121, 2071-2085.	0.5	41
14	Enhanced statistical stability in coherent interferometric imaging. Inverse Problems, 2011, 27, 085004.	1.0	35
15	Time reversal through a solid–liquid interface and super-resolution. Inverse Problems, 2002, 18, 1639-1657.	1.0	24
16	Simulation of seismic response in a city-like environment. Soil Dynamics and Earthquake Engineering, 2005, 25, 487-504.	1.9	24
17	A TIME DOMAIN METHOD FOR MODELING VISCOACOUSTIC WAVE PROPAGATION. Journal of Computational Acoustics, 2006, 14, 201-236.	1.0	22
18	Optimal waveform design for array imaging. Inverse Problems, 2007, 23, 1973-2020.	1.0	21

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19	Source Localization in Random Acoustic Waveguides. Multiscale Modeling and Simulation, 2010, 8, 1981-2022.	0.6	19
20	Asymptotics for the Space-Time Wigner Transform with Applications to Imaging. Interdisciplinary Mathematical Sciences, 2007, , 91-111.	0.4	19
21	Coherent Interferometry in Finely Layered Random Media. Multiscale Modeling and Simulation, 2006, 5, 62-83.	0.6	18
22	Resolution and denoising in near-field imaging. Inverse Problems, 2006, 22, 1437-1456.	1.0	15
23	Detection and imaging in strongly backscattering randomly layered media. Inverse Problems, 2011, 27, 025004.	1.0	15
24	Filtering Random Layering Effects in Imaging. Multiscale Modeling and Simulation, 2010, 8, 751-781.	0.6	14
25	Coherent interferometric imaging, time gating and beamforming. Inverse Problems, 2011, 27, 065008.	1.0	14
26	Low Rank Plus Sparse Decomposition of Synthetic Aperture Radar Data for Target Imaging. IEEE Transactions on Computational Imaging, 2020, 6, 491-502.	2.6	14
27	Optimal illumination and wave form design for imaging in random media. Journal of the Acoustical Society of America, 2007, 122, 3507-3518.	0.5	13
28	Signal to Noise Ratio Analysis in Virtual Source Array Imaging. SIAM Journal on Imaging Sciences, 2015, 8, 248-279.	1.3	13
29	Adaptive Time-Frequency Detection and Filtering for Imaging in Heavy Clutter. SIAM Journal on Imaging Sciences, 2011, 4, 827-849.	1.3	12
30	Robust seismic velocity change estimation using ambient noise recordings. Geophysical Journal International, 2016, 205, 1926-1936.	1.0	12
31	Filtering Deterministic Layer Effects in Imaging. Multiscale Modeling and Simulation, 2009, 7, 1267-1301.	0.6	11
32	Signal-to-Noise Ratio Estimation in Passive Correlation-Based Imaging. SIAM Journal on Imaging Sciences, 2013, 6, 1092-1110.	1.3	11
33	Selective Imaging of Extended Reflectors in Two-Dimensional Waveguides. SIAM Journal on Imaging Sciences, 2013, 6, 2714-2739.	1.3	10
34	Synthetic Aperture Imaging of Direction- and Frequency-Dependent Reflectivities. SIAM Journal on Imaging Sciences, 2016, 9, 52-81.	1.3	10
35	Multifrequency Interferometric Imaging with Intensity-Only Measurements. SIAM Journal on Imaging Sciences, 2017, 10, 1005-1032.	1.3	10
36	A quantitative study of source imaging in random waveguides. Communications in Mathematical Sciences, 2015, 13, 749-776.	0.5	9

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37	Partial-aperture array imaging in acoustic waveguides. Inverse Problems, 2016, 32, 125011.	1.0	8
38	Resolution Analysis of Passive Synthetic Aperture Imaging of Fast Moving Objects. SIAM Journal on Imaging Sciences, 2017, 10, 665-710.	1.3	8
39	Matched-Filter and Correlation-Based Imaging for Fast Moving Objects Using a Sparse Network of Receivers. SIAM Journal on Imaging Sciences, 2017, 10, 2165-2216.	1.3	8
40	A Time Domain Method for Modeling Wave Propagation Phenomena in Viscoacoustic Media. , 2003, , 911-915.		7
41	Seismic response of a set of blocks partially imbedded in soft soil. Comptes Rendus - Mecanique, 2003, 331, 217-224.	2.1	6
42	Efficient numerical simulation for long range wave propagation. Journal of Computational Physics, 2006, 215, 448-464.	1.9	6
43	Signal-to-Noise Ratio analysis for time-reversal based imaging techniques in bounded domains. Wave Motion, 2018, 79, 23-43.	1.0	6
44	Imaging Extended Reflectors in a Terminating Waveguide. SIAM Journal on Imaging Sciences, 2018, 11, 1680-1716.	1.3	6
45	Robust multifrequency imaging with MUSIC. Inverse Problems, 2019, 35, 015007.	1.0	6
46	The Noise Collector for sparse recovery in high dimensions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11226-11232.	3.3	5
47	A Fictitious Domain Method with Mixed Finite Elements for Elastodynamics. SIAM Journal of Scientific Computing, 2007, 29, 1244-1267.	1.3	4
48	Convergence results of the fictitious domain method for a mixed formulation of the wave equation with a Neumann boundary condition. ESAIM: Mathematical Modelling and Numerical Analysis, 2009, 43, 377-398.	0.8	4
49	Time and direction of arrival detection and filtering for imaging in strongly scattering random media. Waves in Random and Complex Media, 2017, 27, 664-689.	1.6	4
50	Quantitative signal subspace imaging. Inverse Problems, 2021, 37, 125006.	1.0	4
51	Synthetic Aperture Imaging and Motion Estimation Using Tensor Methods. SIAM Journal on Imaging Sciences, 2020, 13, 2213-2249.	1.3	4
52	Filtering Deterministic Layer Effects in Imaging. SIAM Review, 2012, 54, 757-798.	4.2	3
53	Generalized Correlation-Based Imaging for Satellites. SIAM Journal on Imaging Sciences, 2020, 13, 1331-1366.	1.3	3
54	Correlation Based Imaging for Rotating Satellites. SIAM Journal on Imaging Sciences, 2021, 14, 271-303.	1.3	3

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55	Finite Element Methods with Discontinuous Displacement. Numerical Insights, 2008, , 331-537.	0.0	3
56	Quantitative subsurface imaging in strongly scattering media. Optics Express, 2018, 26, 27346.	1.7	3
57	Forward and inverse scattering in synthetic aperture radar using machine learning. , 2020, , .		3
58	Subspace projection filters for imaging in random media. Comptes Rendus - Mecanique, 2010, 338, 390-401.	2.1	2
59	Stretching Method-Based Operational Modal Analysis of An Old Masonry Lighthouse. Sensors, 2019, 19, 3599.	2.1	2
60	Synthetic Aperture Imaging With Intensity-Only Data. IEEE Transactions on Computational Imaging, 2020, 6, 87-94.	2.6	2
61	Imaging with highly incomplete and corrupted data. Inverse Problems, 2020, 36, 035010.	1.0	2
62	Fast Signal Recovery From Quadratic Measurements. IEEE Transactions on Signal Processing, 2021, 69, 2042-2055.	3.2	2
63	TIME REVERSAL IN ELASTODYNAMICS AND APPLICATIONS TO STRUCTURAL HEALTH MONITORING. , 2015, , .		2
64	A comparative study of data filtering methods for imaging in strongly scattering media. Wave Motion, 2017, 68, 97-113.	1.0	1
65	Incoherent source localization in random acoustic waveguides. Waves in Random and Complex Media, 2020, 30, 81-106.	1.6	1
66	Staggered explicit-implicit time-discretization for elastodynamics with dissipative internal variables. ESAIM: Mathematical Modelling and Numerical Analysis, 2021, 55, S397-S416.	0.8	1
67	Multi-Frequency Quantitative Imaging of High Contrast Objects: A Canonical Approximation. Acoustical Imaging, 2004, , 675-682.	0.2	1
68	Statistical Stability and Time-Reversal Imaging in Random Media. The IMA Volumes in Mathematics and Its Applications, 2004, , 15-24.	0.5	1
69	Resolution Estimation for Imaging and Time Reversal in Scattering Media. , 2003, , 631-636.		1
70	Intensity-only inverse scattering with MUSIC. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, 1829.	0.8	1
71	Stretching Method-Based Damage Detection Using Neural Networks. Sensors, 2022, 22, 830.	2.1	1
72	Correlation-based imaging of fast moving objects using a sparse network of passive receivers. , 2018, , .		0

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73	A Mixed Finite Element-Based Numerical Method for Elastodynamics Considering Adhesive Interface Damage for Dynamic Fracture. Journal of Theoretical and Computational Acoustics, 2021, 29, 2150010.	0.5	0
74	Fictitious Domains Methods for Wave Diffraction. Numerical Insights, 2008, , 359-384.	0.0	0
75	3. Boundary Conditions. , 2012, , 77-98.		0
76	Imaging in Three-Dimensional Waveguides with Partial Aperture Data. Journal of Theoretical and Computational Acoustics, 2021, 29, .	0.5	0
77	Sparse signal recovery from correlation measurements using the noise collector. , 2021, , .		0