

# Liviu Marin

## List of Publications by Year in descending order

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95  
papers

2,614  
citations

185998

28  
h-index

214527

47  
g-index

96  
all docs

96  
docs citations

96  
times ranked

734  
citing authors

#	ARTICLE	IF	CITATIONS
1	A survey of applications of the MFS to inverse problems. <i>Inverse Problems in Science and Engineering</i> , 2011, 19, 309-336.	1.2	193
2	The method of fundamental solutions for the Cauchy problem associated with two-dimensional Helmholtz-type equations. <i>Computers and Structures</i> , 2005, 83, 267-278.	2.4	137
3	Numerical solution of the Cauchy problem for steady-state heat transfer in two-dimensional functionally graded materials. <i>International Journal of Solids and Structures</i> , 2005, 42, 4338-4351.	1.3	116
4	Conjugate gradient-boundary element solution to the Cauchy problem for Helmholtz-type equations. <i>Computational Mechanics</i> , 2003, 31, 367-377.	2.2	110
5	An alternating iterative algorithm for the Cauchy problem associated to the Helmholtz equation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2003, 192, 709-722.	3.4	94
6	The method of fundamental solutions for the Cauchy problem in two-dimensional linear elasticity. <i>International Journal of Solids and Structures</i> , 2004, 41, 3425-3438.	1.3	91
7	Nonlinear transient heat conduction analysis of functionally graded materials in the presence of heat sources using an improved meshless radial point interpolation method. <i>Applied Mathematical Modelling</i> , 2011, 35, 4157-4174.	2.2	81
8	The method of fundamental solutions for inverse source problems associated with the steady-state heat conduction. <i>International Journal for Numerical Methods in Engineering</i> , 2007, 69, 1570-1589.	1.5	76
9	The method of fundamental solutions for nonlinear functionally graded materials. <i>International Journal of Solids and Structures</i> , 2007, 44, 6878-6890.	1.3	74
10	BEM solution for the Cauchy problem associated with Helmholtz-type equations by the Landweber method. <i>Engineering Analysis With Boundary Elements</i> , 2004, 28, 1025-1034.	2.0	72
11	A meshless method for the numerical solution of the Cauchy problem associated with three-dimensional Helmholtz-type equations. <i>Applied Mathematics and Computation</i> , 2005, 165, 355-374.	1.4	72
12	A meshless method for solving the cauchy problem in three-dimensional elastostatics. <i>Computers and Mathematics With Applications</i> , 2005, 50, 73-92.	1.4	68
13	The method of fundamental solutions for inverse boundary value problems associated with the two-dimensional biharmonic equation. <i>Mathematical and Computer Modelling</i> , 2005, 42, 261-278.	2.0	64
14	Boundary element method for the Cauchy problem in linear elasticity. <i>Engineering Analysis With Boundary Elements</i> , 2001, 25, 783-793.	2.0	55
15	Boundary element solution for the Cauchy problem in linear elasticity using singular value decomposition. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2002, 191, 3257-3270.	3.4	49
16	Comparison of regularization methods for solving the Cauchy problem associated with the Helmholtz equation. <i>International Journal for Numerical Methods in Engineering</i> , 2004, 60, 1933-1947.	1.5	43
17	A domain decomposition method for the stable analysis of inverse nonlinear transient heat conduction problems. <i>International Journal of Heat and Mass Transfer</i> , 2013, 58, 125-134.	2.5	39
18	Regularized boundary element solution for an inverse boundary value problem in linear elasticity. <i>Communications in Numerical Methods in Engineering</i> , 2002, 18, 817-825.	1.3	38

#	ARTICLE	IF	CITATIONS
19	Boundary element analysis of nonlinear transient heat conduction problems involving non-homogenous and nonlinear heat sources using time-dependent fundamental solutions. <i>Engineering Analysis With Boundary Elements</i> , 2010, 34, 655-665.	2.0	37
20	Treatment of singularities in the method of fundamental solutions for two-dimensional Helmholtz-type equations. <i>Applied Mathematical Modelling</i> , 2010, 34, 1615-1633.	2.2	34
21	Conjugate Gradient-Boundary Element Method for the Cauchy Problem in Elasticity. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2002, 55, 227-247.	0.5	32
22	The method of fundamental solutions for inverse boundary value problems associated with the steady-state heat conduction in anisotropic media. <i>International Journal for Numerical Methods in Engineering</i> , 2006, 65, 1865-1891.	1.5	32
23	Boundary element analysis of uncoupled transient thermo-elastic problems with time- and space-dependent heat sources. <i>Applied Mathematics and Computation</i> , 2011, 218, 1862-1882.	1.4	31
24	The method of fundamental solutions for an inverse boundary value problem in static thermo-elasticity. <i>Computers and Structures</i> , 2014, 135, 32-39.	2.4	31
25	An alternating iterative MFS algorithm for the Cauchy problem for the modified Helmholtz equation. <i>Computational Mechanics</i> , 2010, 45, 665-677.	2.2	30
26	Regularized method of fundamental solutions for boundary identification in two-dimensional isotropic linear elasticity. <i>International Journal of Solids and Structures</i> , 2010, 47, 3326-3340.	1.3	30
27	Treatment of singularities in Helmholtz-type equations using the boundary element method. <i>Journal of Sound and Vibration</i> , 2004, 278, 39-62.	2.1	29
28	The plane wave method for inverse problems associated with Helmholtz-type equations. <i>Engineering Analysis With Boundary Elements</i> , 2008, 32, 223-240.	2.0	29
29	The method of fundamental solutions for the detection of rigid inclusions and cavities in plane linear elastic bodies. <i>Computers and Structures</i> , 2012, 106-107, 176-188.	2.4	29
30	Boundary element "minimal error method for the Cauchy problem associated with Helmholtz-type equations. <i>Computational Mechanics</i> , 2009, 44, 205-219.	2.2	28
31	Dual reciprocity boundary element method solution of the Cauchy problem for Helmholtz-type equations with variable coefficients. <i>Journal of Sound and Vibration</i> , 2006, 297, 89-105.	2.1	27
32	The method of fundamental solutions for three-dimensional inverse geometric elasticity problems. <i>Computers and Structures</i> , 2016, 166, 51-59.	2.4	27
33	Forward electric field calculation using BEM for time-varying magnetic field gradients and motion in strong static fields. <i>Engineering Analysis With Boundary Elements</i> , 2009, 33, 1074-1088.	2.0	26
34	A relaxation method of an alternating iterative algorithm for the Cauchy problem in linear isotropic elasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 3179-3196.	3.4	25
35	A moving pseudo-boundary method of fundamental solutions for void detection. <i>Numerical Methods for Partial Differential Equations</i> , 2013, 29, 935-960.	2.0	25
36	Regularized MFS solution of inverse boundary value problems in three-dimensional steady-state linear thermoelasticity. <i>International Journal of Solids and Structures</i> , 2016, 91, 127-142.	1.3	25

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37	Boundary Element Regularisation Methods for Solving the Cauchy Problem in Linear Elasticity. Inverse Problems in Science and Engineering, 2002, 10, 335-357.	0.5	24
38	The minimal error method for the Cauchy problem in linear elasticity. Numerical implementation for two-dimensional homogeneous isotropic linear elasticity. International Journal of Solids and Structures, 2009, 46, 957-974.	1.3	23
39	The method of fundamental solutions for solving direct and inverse Signorini problems. Computers and Structures, 2015, 151, 11-19.	2.4	23
40	BEM first-order regularisation method in linear elasticity for boundary identification. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 2059-2071.	3.4	22
41	The MFS for numerical boundary identification in two-dimensional harmonic problems. Engineering Analysis With Boundary Elements, 2011, 35, 342-354.	2.0	22
42	The MFS-MPS for two-dimensional steady-state thermoelasticity problems. Engineering Analysis With Boundary Elements, 2013, 37, 1004-1020.	2.0	22
43	An alternating iterative algorithm for the Cauchy problem in anisotropic elasticity. Engineering Analysis With Boundary Elements, 2007, 31, 667-682.	2.0	21
44	Analysis of polygonal fins using the boundary element method. Applied Thermal Engineering, 2004, 24, 1321-1339.	3.0	18
45	Boundary reconstruction in two-dimensional steady state anisotropic heat conduction using a regularized meshless method. International Journal of Heat and Mass Transfer, 2010, 53, 5815-5826.	2.5	17
46	Relaxation procedures for an iterative MFS algorithm for the stable reconstruction of elastic fields from Cauchy data in two-dimensional isotropic linear elasticity. International Journal of Solids and Structures, 2010, 47, 3462-3479.	1.3	17
47	Relaxation procedures for an iterative MFS algorithm for two-dimensional steady-state isotropic heat conduction Cauchy problems. Engineering Analysis With Boundary Elements, 2011, 35, 415-429.	2.0	17
48	Fading regularization MFS algorithm for inverse boundary value problems in two-dimensional linear elasticity. International Journal of Solids and Structures, 2016, 78-79, 9-20.	1.3	17
49	Boundary element-Landweber method for the Cauchy problem in linear elasticity. IMA Journal of Applied Mathematics, 2004, 70, 323-340.	0.8	16
50	The MFS for the Cauchy problem in two-dimensional steady-state linear thermoelasticity. International Journal of Solids and Structures, 2013, 50, 3387-3398.	1.3	16
51	An invariant method of fundamental solutions for two-dimensional steady-state anisotropic heat conduction problems. International Journal of Heat and Mass Transfer, 2016, 94, 449-464.	2.5	16
52	Identification of material properties and cavities in two-dimensional linear elasticity. Computational Mechanics, 2003, 31, 293-300.	2.2	15
53	Numerical boundary identification for Helmholtz-type equations. Computational Mechanics, 2006, 39, 25-40.	2.2	15
54	A meshless method for the stable solution of singular inverse problems for two-dimensional Helmholtz-type equations. Engineering Analysis With Boundary Elements, 2010, 34, 274-288.	2.0	15

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55	A moving pseudo-boundary MFS for void detection in two-dimensional thermoelasticity. International Journal of Mechanical Sciences, 2014, 88, 276-288.	3.6	15
56	A meshless fading regularization algorithm for solving the Cauchy problem for the three-dimensional Helmholtz equation. Numerical Algorithms, 2019, 82, 869-894.	1.1	14
57	An iterative boundary element algorithm for a singular Cauchy problem in linear elasticity. Computational Mechanics, 2002, 28, 479-488.	2.2	13
58	Parameter identification in isotropic linear elasticity using the boundary element method. Engineering Analysis With Boundary Elements, 2004, 28, 221-233.	2.0	13
59	Regularized collocation Trefftz method for void detection in two-dimensional steady-state heat conduction problems. Inverse Problems in Science and Engineering, 2014, 22, 395-418.	1.2	13
60	The MFS for the identification of a sound-soft interior acoustic scatterer. Engineering Analysis With Boundary Elements, 2017, 83, 107-112.	2.0	13
61	Fading regularization MFS algorithm for the Cauchy problem associated with the two-dimensional Helmholtz equation. International Journal of Solids and Structures, 2017, 125, 122-133.	1.3	12
62	Detection of cavities in Helmholtz-type equations using the boundary element method. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 4006-4023.	3.4	11
63	A numerical study of the SVD-MFS solution of inverse boundary value problems in two-dimensional steady-state linear thermoelasticity. Numerical Methods for Partial Differential Equations, 2015, 31, 168-201.	2.0	11
64	The method of fundamental solutions for the identification of a scatterer with impedance boundary condition in interior inverse acoustic scattering. Engineering Analysis With Boundary Elements, 2018, 92, 218-224.	2.0	11
65	A Moving Pseudo-Boundary MFS for Three-Dimensional Void Detection. Advances in Applied Mathematics and Mechanics, 2013, 5, 510-527.	0.7	10
66	PARAMETER IDENTIFICATION IN TWO-DIMENSIONAL FINS USING THE BOUNDARY ELEMENT METHOD. Numerical Heat Transfer; Part A: Applications, 2006, 50, 315-344.	1.2	9
67	An invariant method of fundamental solutions for two-dimensional isotropic linear elasticity. International Journal of Solids and Structures, 2017, 117, 191-207.	1.3	9
68	Recovery of a space-dependent vector source in anisotropic thermoelastic systems. Computer Methods in Applied Mechanics and Engineering, 2017, 321, 269-293.	3.4	9
69	Landweber-Fridman algorithms for the Cauchy problem in steady-state anisotropic heat conduction. Mathematics and Mechanics of Solids, 2020, 25, 1340-1363.	1.5	9
70	Efficient MFS Algorithms for Problems in Thermoelasticity. Journal of Scientific Computing, 2013, 56, 96-121.	1.1	8
71	The boundary element method for the numerical recovery of a circular inhomogeneity in an elliptic equation. Engineering Analysis With Boundary Elements, 2004, 28, 413-419.	2.0	7
72	The reconstruction of a solely time-dependent load in a simply supported non-homogeneous Euler-Bernoulli beam. Applied Mathematical Modelling, 2020, 79, 914-933.	2.2	7

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73	The method of fundamental solutions for Brinkman flows. Part I. Exterior domains. Journal of Engineering Mathematics, 2021, 126, 1.	0.6	7
74	Two-dimensional thermal analysis of a polygonal fin with two tubes on a square pitch. International Journal of Heat and Mass Transfer, 2005, 48, 3018-3033.	2.5	6
75	Numerical solution for an inverse MRI problem using a regularised boundary element method. Engineering Analysis With Boundary Elements, 2008, 32, 658-675.	2.0	6
76	A relaxation method of an alternating iterative MFS algorithm for the Cauchy problem associated with the two-dimensional modified Helmholtz equation. Numerical Methods for Partial Differential Equations, 2012, 28, 899-925.	2.0	6
77	Non-iterative regularized MFS solution of inverse boundary value problems in linear elasticity: A numerical study. Applied Mathematics and Computation, 2017, 293, 265-286.	1.4	6
78	Parameter identification in Helmholtz-type equations with a variable coefficient using a regularized DRBEM. Inverse Problems in Science and Engineering, 2006, 14, 837-858.	1.2	5
79	Determination of optimum cooling conditions for continuous casting by a meshless method. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2013, 227, 1022-1035.	1.1	5
80	The method of fundamental solutions for complex electrical impedance tomography. Engineering Analysis With Boundary Elements, 2014, 46, 126-139.	2.0	5
81	Numerical solution of an inverse problem in magnetic resonance imaging using a regularized higher-order boundary element method. WIT Transactions on Modelling and Simulation, 2007, , .	0.0	5
82	A gradient-based regularization algorithm for the Cauchy problem in steady-state anisotropic heat conduction. Computers and Mathematics With Applications, 2022, 119, 220-240.	1.4	5
83	A procedure for the temperature reconstruction in corner domains from Cauchy data. Inverse Problems, 2007, 23, 357-372.	1.0	4
84	The method of fundamental solutions for problems in static thermo-elasticity with incomplete boundary data. Inverse Problems in Science and Engineering, 2017, 25, 652-673.	1.2	4
85	The method of fundamental solutions for Brinkman flows. Part II. Interior domains. Journal of Engineering Mathematics, 2021, 127, 1.	0.6	4
86	BEM-Fading regularization algorithm for Cauchy problems in 2D anisotropic heat conduction. Numerical Algorithms, 2021, 88, 1667-1702.	1.1	4
87	Fading regularization MFS algorithm for the Cauchy problem in anisotropic heat conduction. Computational Mechanics, 2021, 68, 921-941.	2.2	4
88	Simultaneous numerical determination of a corroded boundary and its admittance. Inverse Problems in Science and Engineering, 2015, 23, 1120-1137.	1.2	3
89	MFS-Fading Regularization Method for Inverse BVPs in Anisotropic Heat Conduction. SEMA SIMAI Springer Series, 2020, , 121-138.	0.4	2
90	The MFS for the detection of inner boundaries in linear elasticity. WIT Transactions on Modelling and Simulation, 2011, , .	0.0	2

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91	The Plane Waves Method for Numerical Boundary Identification. Advances in Applied Mathematics and Mechanics, 2017, 9, 1312-1329.	0.7	1
92	MFS-based solution to two-dimensional linear thermoelasticity problems. , 2012, , .		1
93	Boundary Element Solution for the Cauchy Problem Associated with the Helmholtz Equation by the Tikhonov Regularisation Method. , 2003, , 485-494.		0
94	Application of engineering analysis techniques to the design of magnetic resonance imaging (MRI) coils. Journal of Physics: Conference Series, 2008, 105, 012004.	0.3	0
95	Finite element method for the reconstruction of a time-dependent heat source in isotropic thermoelasticity systems of type-III. Zeitschrift Fur Angewandte Mathematik Und Physik, 2022, 73, 1.	0.7	0