

Frédérique Le Louër

List of Publications by Year in descending order

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papers

367
citations

623734

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#	ARTICLE	IF	CITATIONS
1	Topological Sensitivity for Solving Inverse Multiple Scattering Problems in Three-dimensional Electromagnetism. Part I: One Step Method. <i>SIAM Journal on Imaging Sciences</i> , 2017, 10, 1291-1321.	2.2	36
2	Shape Derivatives of Boundary Integral Operators in Electromagnetic Scattering. Part I: Shape Differentiability of Pseudo-homogeneous Boundary Integral Operators. <i>Integral Equations and Operator Theory</i> , 2012, 72, 509-535.	0.8	29
3	Shape Derivatives of Boundary Integral Operators in Electromagnetic Scattering. Part II: Application to Scattering by a Homogeneous Dielectric Obstacle. <i>Integral Equations and Operator Theory</i> , 2012, 73, 17-48.	0.8	26
4	Fast iterative boundary element methods for high-frequency scattering problems in 3D elastodynamics. <i>Journal of Computational Physics</i> , 2017, 341, 429-446.	3.8	26
5	Approximate local Dirichlet-to-Neumann map for three-dimensional time-harmonic elastic waves. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 297, 62-83.	6.6	23
6	Well-posed boundary integral formulations for high-frequency elastic scattering problems in three dimensions. <i>Mathematical Methods in the Applied Sciences</i> , 2015, 38, 1705-1733.	2.3	22
7	A high order spectral algorithm for elastic obstacle scattering in three dimensions. <i>Journal of Computational Physics</i> , 2014, 279, 1-17.	3.8	21
8	When topological derivatives meet regularized Gauss-Newton iterations in holographic 3D imaging. <i>Journal of Computational Physics</i> , 2019, 388, 224-251.	3.8	21
9	On the Kleinman-Martin Integral Equation Method for Electromagnetic Scattering by a Dielectric Body. <i>SIAM Journal on Applied Mathematics</i> , 2011, 71, 635-656.	1.8	20
10	On the Fréchet Derivative in Elastic Obstacle Scattering. <i>SIAM Journal on Applied Mathematics</i> , 2012, 72, 1493-1507.	1.8	20
11	Spectrally accurate numerical solution of hypersingular boundary integral equations for three-dimensional electromagnetic wave scattering problems. <i>Journal of Computational Physics</i> , 2014, 275, 662-666.	3.8	17
12	On the use of Lamb modes in the linear sampling method for elastic waveguides. <i>Inverse Problems</i> , 2011, 27, 055001.	2.0	15
13	A domain derivative-based method for solving elastodynamic inverse obstacle scattering problems. <i>Inverse Problems</i> , 2015, 31, 115006.	2.0	15
14	Detection of multiple impedance obstacles by non-iterative topological gradient based methods. <i>Journal of Computational Physics</i> , 2019, 388, 534-560.	3.8	15
15	Topological Sensitivity for Solving Inverse Multiple Scattering Problems in Three-Dimensional Electromagnetism. Part II: Iterative Method. <i>SIAM Journal on Imaging Sciences</i> , 2018, 11, 734-769.	2.2	14
16	A spectrally accurate method for the direct and inverse scattering problems by multiple 3D dielectric obstacles. <i>ANZIAM Journal</i> , 0, 59, 1.	0.0	12
17	Material derivatives of boundary integral operators in electromagnetism and application to inverse scattering problems. <i>Inverse Problems</i> , 2016, 32, 095003.	2.0	11
18	Topological sensitivity analysis revisited for time-harmonic wave scattering problems. Part I: the free space case. <i>Engineering Computations</i> , 2022, 39, 232-271.	1.4	7

#	ARTICLE	IF	CITATIONS
19	Generalized impedance boundary conditions and shape derivatives for 3D Helmholtz problems. <i>Mathematical Models and Methods in Applied Sciences</i> , 2016, 26, 1995-2033.	3.3	4
20	Shape Sensitivity Analysis for Elastic Structures with Generalized Impedance Boundary Conditions of the Wentzell Type – Application to Compliance Minimization. <i>Journal of Elasticity</i> , 2019, 136, 17-53.	1.9	4
21	Thin layer approximations in mechanical structures: The Dirichlet boundary condition case. <i>Comptes Rendus Mathematique</i> , 2019, 357, 576-581.	0.3	3
22	Topological sensitivity analysis revisited for time-harmonic wave scattering problems. Part II: recursive computations by the boundary integral equation method. <i>Engineering Computations</i> , 2022, 39, 272-312.	1.4	3
23	Analytical preconditioners for Neumann elastodynamic boundary element methods. <i>SN Partial Differential Equations and Applications</i> , 2021, 2, 1.	0.6	2
24	Topological Imaging Methods for the Iterative Detection of Multiple Impedance Obstacles. <i>Journal of Mathematical Imaging and Vision</i> , 2022, 64, 321-340.	1.3	1
25	An Inverse Parameter Problem with Generalized Impedance Boundary Condition for Two-Dimensional Linear Viscoelasticity. <i>SIAM Journal on Applied Mathematics</i> , 2021, 81, 1668-1690.	1.8	0