Michael Vogelius

List of Publications by Year
in descending order

28 papers	2,343 citations	361413 20 h-index	501196 28 g-index
29 all docs	29 docs citations	29 times ranked	737 citing authors

#	Article	IF	Citations
1	Determining conductivity by boundary measurements. Communications on Pure and Applied Mathematics, 1984, 37, 289-298.	3.1	426
2	A new model for thin plates with rapidly varying thickness. International Journal of Solids and Structures, 1984, 20, 333-350.	2.7	211
3	Gradient Estimates for Solutions to Divergence Form Elliptic Equations with Discontinuous Coefficients. Archive for Rational Mechanics and Analysis, 2000, 153, 91-151.	2.4	208
4	A Backprojection Algorithm for Electrical Impedance Imaging. SIAM Journal on Applied Mathematics, 1990, 50, 216-243.	1.8	183
5	Relaxation of a variational method for impedance computed tomography. Communications on Pure and Applied Mathematics, 1987, 40, 745-777.	3.1	178
6	Identification of small inhomogeneities of extreme conductivity by boundary measurements: a theorem on continuous dependence. Archive for Rational Mechanics and Analysis, 1989, 105, 299-326.	2.4	155
7	Title is missing!. Indiana University Mathematics Journal, 1989, 38, 527.	0.9	148
8	A new model for thin plates with rapidly varying thickness. II. A convergence proof. Quarterly of Applied Mathematics, 1985, 43, 1-22.	0.7	99
9	First-order corrections to the homogenised eigenvalues of a periodic composite medium. A convergence proof. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1997, 127, 1263-1299.	1.2	98
10	An Elliptic Regularity Result for a Composite Medium with "Touching" Fibers of Circular Cross-Section. SIAM Journal on Mathematical Analysis, 2000, 31, 651-677.	1.9	92
11	A right-inverse for the divergence operator in spaces of piecewise polynomials. Numerische Mathematik, 1983, 41, 19-37.	1.9	65
12	First-Order Corrections to the Homogenized Eigenvalues of a Periodic Composite Medium. SIAM Journal on Applied Mathematics, 1993, 53, 1636-1668.	1.8	61
13	A computational algorithm to determine cracks from electrostatic boundary measurements. International Journal of Engineering Science, 1991, 29, 917-937.	5.0	57
14	A Uniqueness Result Concerning the Identification of a Collection of Cracks from Finitely Many Electrostatic Boundary Measurements. SIAM Journal on Mathematical Analysis, 1992, 23, 950-958.	1.9	53
15	A new model for thin plates with rapidly varying thickness. III. Comparison of different scalings. Quarterly of Applied Mathematics, 1986, 44, 35-48.	0.7	52
16	A nonlinear elliptic boundary value problem related to corrosion modeling. Quarterly of Applied Mathematics, 1998, 56, 479-505.	0.7	51
17	A computational algorithm to determine crack locations from electrostatic boundary measurements. The case of multiple cracks. International Journal of Engineering Science, 1994, 32, 579-603.	5.0	39
18	Singular solutions to a nonlinear elliptic boundary value problem originating from corrosion modeling. Quarterly of Applied Mathematics, 2002, 60, 675-694.	0.7	32

#	Article	IF	Citations
19	On the existence and â€˜blow-upâ€™ of solutions to a two-dimensional nonlinear boundary-value problem arising in corrosion modelling. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2003, 133, 119-149.	1.2	30
20	An inverse problem for the equation $\triangle u=-cu-d$. Annales De L'Institut Fourier, 1994, 44, 1181-1209.	0.6	22
21	Crack determination from boundary measurements?Reconstruction using experimental data. Journal of Nondestructive Evaluation, 1993, 12, 163-174.	2.4	20
22	Thin Plates with Rapidly Varying Thickness, and their Relation to Structural Optimization. The IMA Volumes in Mathematics and Its Applications, 1986, , 126-149.	0.5	17
23	A Projection Method Applied to Diffusion in a Periodic Structure. SIAM Journal on Applied Mathematics, 1982, 42, 1302-1322.	1.8	14
24	Blow-up behavior of Planar Harmonic Functions Satisfying a Certain Exponential Neumann Boundary Condition. SIAM Journal on Mathematical Analysis, 2005, 36, 1772-1806.	1.9	12
25	An inverse problem originating from magnetohydrodynamics, III. Domains with corners of arbitrary angles. Asymptotic Analysis, 1995, 11, 289-315.	0.5	9
26	Finiteness Results Concerning Nonscattering Wave Numbers for Incident Plane and Herglotz Waves. SIAM Journal on Mathematical Analysis, 2021, 53, 5436-5464.	1.9	6
27	Reconstruction of Multiple Cracks from Experimental, Electrostatic Boundary Measurements. European Consortium for Mathematics in Industry, 1994, , 147-167.	0.4	3
28	A variational method to find effective coefficients for periodic media. A comparison with standard homogenization. , 1982, , 285-296.		1