Bouchitte Guy

List of Publications by Year
in descending order

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71 papers	2,045 citations	218677 26 h-index	243625 44 g-index
71 all docs	71 docs citations	71 times ranked	757 citing authors

#	Article	IF	Citations
1	Homogenization of a set of parallel fibres. Waves in Random and Complex Media, 1997, 7, 245-256.	1.5	107
2	Characterization of optimal shapes and masses through Monge-Kantorovich equation. Journal of the European Mathematical Society, 2001, 3, 139-168.	1.4	104
3	Phase Transition with the Line-Tension Effect. Archive for Rational Mechanics and Analysis, 1998, 144, 1-46.	2.4	96
4	Homogenization near resonances and artificial magnetism from dielectrics. Comptes Rendus Mathematique, 2004, 339, 377-382.	0.3	95
5	A Global Method for Relaxation. Archive for Rational Mechanics and Analysis, 1998, 145, 51-98.	2.4	89
6	Energies with respect to a measure and applications to low dimensional structures. Calculus of Variations and Partial Differential Equations, 1997, 5, 37-54.	1.7	83
7	The calibration method for the Mumford-Shah functional and free-discontinuity problems. Calculus of Variations and Partial Differential Equations, 2003, 16, 299-333.	1.7	81
8	Theory of Mesoscopic Magnetism in Photonic Crystals. Physical Review Letters, 2005, 94, 183902.	7.8	79
9	Integral representation of convex functionals on a space of measures. Journal of Functional Analysis, 1988, 80, 398-420.	1.4	70
10	Singular perturbations of variational problems arising from a two-phase transition model. Applied Mathematics and Optimization, 1990, 21, 289-314.	1.6	69
11	Homogenization of Maxwell's Equations in a Split Ring Geometry. Multiscale Modeling and Simulation, 2010, 8, 717-750.	1.6	69
12	A Global Method for Relaxation in W 1,p and in SBV p. Archive for Rational Mechanics and Analysis, 2002, 165, 187-242.	2.4	62
13	Homogenization of Thin Structures by Two-Scale Method with Respect to Measures. SIAM Journal on Mathematical Analysis, 2001, 32, 1198-1226.	1.9	60
14	Cloaking of Small Objects by Anomalous Localized Resonance. Quarterly Journal of Mechanics and Applied Mathematics, 2010, 63, 437-463.	1.3	59
15	New lower semicontinuity results for nonconvex functionals defined on measures. Nonlinear Analysis: Theory, Methods & Applications, 1990, 15, 679-692.	1.1	58
16	MathÃ©matiques/Mathematics Shape optimization solutions via Monge-Kantorovich equation. Comptes Rendus Mathematique, 1997, 324, 1185-1191.	0.5	58
17	Homogenization of a Wire Photonic Crystal: The Case of Small Volume Fraction. SIAM Journal on Applied Mathematics, 2006, 66, 2061-2084.	1.8	49
18	Homogenization of the 3D Maxwell system near resonances and artificial magnetism. Comptes Rendus Mathematique, 2009, 347, 571-576.	0.3	49

#	Article	IF	Citations
19	On the curvature and torsion effects in one dimensional waveguides. ESAIM - Control, Optimisation and Calculus of Variations, 2007, 13, 793-808.	1.3	48
20	Homogenization Techniques as Applied in the Electromagnetic Theory of Gratings. Electromagnetics, 1985, 5, 17-36.	0.7	46
21	Negative refraction in periodic and random photonic crystals. New Journal of Physics, 2005, 7, 159-159.	2.9	43
22	Left-handed media and homogenization of photonic crystals. Optics Letters, 2005, 30, 1189.	3.3	40
23	A complete-damage problem at small strains. Zeitschrift Fur Angewandte Mathematik Und Physik, 2009, 60, 205-236.	1.4	37
24	A p-Laplacian Approximation for Some Mass Optimization Problems. Journal of Optimization Theory and Applications, 2003, 118, 1-25.	1.5	30
25	MICHELL TRUSSES AND LINES OF PRINCIPAL ACTION. Mathematical Models and Methods in Applied Sciences, 2008, 18, 1571-1603.	3.3	27
26	Bloch vector dependence of the plasma frequency in metallic photonic crystals. Physical Review E, 2006, 74, 056612.	2.1	26
27	Relaxation of bulk and interfacial energies. Archive for Rational Mechanics and Analysis, 1996, 135, 107-173.	2.4	25
28	A new class of costs for optimal transport planning. European Journal of Applied Mathematics, 2019, 30, 1229-1263.	2.9	24
29	Homogenization of Dielectric Photonic Quasi Crystals. Multiscale Modeling and Simulation, 2010, 8, 1862-1881.	1.6	22
30	Asymptotic analysis of a class of optimal location problems. Journal Des Mathematiques Pures Et Appliquees, 2011, 95, 382-419.	1.6	22
31	On the concepts of a perfectly conducting material and of a perfectly conducting and infinitely thin screen. Radio Science, 1989, 24, 13-26.	1.6	21
32	Asymptotique d'un problÃ¨me de positionnement optimal. Comptes Rendus Mathematique, 2002, 335, 853-858.	0.3	21
33	Homogenization Near Resonances and Artificial Magnetism in Three Dimensional Dielectric Metamaterials. Archive for Rational Mechanics and Analysis, 2017, 225, 1233-1277.	2.4	20
34	Bending Moment in Membrane Theory. Journal of Elasticity, 2003, 73, 75-99.	1.9	19
35	Second-order energies on thin structures: variational theory and non-local effects. Journal of Functional Analysis, 2003, 204, 228-267.	1.4	19
36	Optimality Conditions for Mass Design Problems and Applications to Thin Plates. Archive for Rational Mechanics and Analysis, 2007, 184, 257-284.	2.4	15

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37	Resonant homogenization of a dielectric metamaterial. Microwave and Optical Technology Letters, 2009, 51, 2695-2701.	1.4	15
38	Singular perturbations and homogenization in stratified media. Applicable Analysis, 1996, 61, 307-341.	1.3	13
39	Convergence of Sobolev spaces on varying manifolds. Journal of Geometric Analysis, 2001, 11, 399-422.	1.0	13
40	Multiscale Nanorod Metamaterials and Realizable Permittivity Tensors. Communications in Computational Physics, 2012, 11, 489-507.	1.7	12
41	A new L^infty estimate in optimal mass transport. Proceedings of the American Mathematical Society, 2007, 135, 3525-3536.	0.8	11
42	Shape derivatives for minima of integral functionals. Mathematical Programming, 2014, 148, 111-142.	2.4	10
43	Homogenization of nonlocal wire metamaterial via a renormalization approach. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 1275.	2.1	9
44	Optimal Thin Torsion Rods and Cheeger Sets. SIAM Journal on Mathematical Analysis, 2012, 44, 483-512.	1.9	8
45	A Variational Method for Second Order Shape Derivatives. SIAM Journal on Control and Optimization, 2016, 54, 1056-1084.	2.1	8
46	Convex Analysis and Duality Methods. , 2006, , 642-652.		8
47	Multifonctions s.c.i. et RÃ©gularisÃ©e s.c.i. Essentielle. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 1989, 6, 123-149.	1.4	7
48	A nonstandard free boundary problem arising in the shape optimization of thin torsion rods. Interfaces and Free Boundaries, 2013, 15, 95-119.	0.8	7
49	Variational Theory of Weak Geometric Structures: The Measure Method and Its Applications. , 2002, , 19-40.		7
50	The calibration method for the mumford-shah functional. Comptes Rendus Mathematique, 1999, 329, 249-254.	0.5	6
51	Do Fresnel coefficients exist?. Wave Motion, 2005, 42, 75-95.	2.0	6
52	Structural Optimization of Thin Elastic Plates: The Three Dimensional Approach. Archive for Rational Mechanics and Analysis, 2011, 202, 829-874.	2.4	6
53	Excitonic states and their wave functions in anisotropic materials: A computation using the finiteâ€element method and its application to AlN. Physica Status Solidi (B): Basic Research, 2012, 249, 455-458.	1.5	6
54	Bounds for the effective coefficients ofÂhomogenized low-dimensional structures. Journal Des Mathematiques Pures Et Appliquees, 2002, 81, 453-469.	1.6	5

#	Article	IF	Citations
55	Optimal Design of Thin Plates by a Dimension Reduction for Linear Constrained Problems. SIAM Journal on Control and Optimization, 2007, 46, 1664-1682.	2.1	5
56	A general class of phase transition models with weighted interface energy. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2008, 25, 1111-1143.	1.4	5
57	Thin waveguides with Robin boundary conditions. Journal of Mathematical Physics, 2012, 53, 123517.	1.1	5
58	REGULAR APPROXIMATION OF FREE-DISCONTINUITY PROBLEMS. Mathematical Models and Methods in Applied Sciences, 2000, 10, 1073-1097.	3.3	4
59	3Dâ€“2D analysis for the optimal elastic compliance problem. Comptes Rendus Mathematique, 2007, 345, 713-718.	0.3	4
60	Resonant effects in random dielectric structures. ESAIM - Control, Optimisation and Calculus of Variations, 2015, 21, 217-246.	1.3	4
61	A Duality Theory for Non-convex Problems in the Calculus of Variations. Archive for Rational Mechanics and Analysis, 2018, 229, 361-415.	2.4	4
62	Homogenization of second order energies on periodic thin structures. Calculus of Variations and Partial Differential Equations, 2004, 20, 175-211.	1.7	3
63	Duality for non-convex variational problems. Comptes Rendus Mathematique, 2015, 353, 375-379.	0.3	3
64	Optimal Design Versus Maximal Mongeâ€“Kantorovich Metrics. Archive for Rational Mechanics and Analysis, 2022, 243, 1449.	2.4	3
65	The optimal compliance problem for thin torsion rods: A 3D-1D analysis leading to Cheeger-type solutions. Comptes Rendus Mathematique, 2010, 348, 467-471.	0.3	2
66	Relaxed multi-marginal costs and quantization effects. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2021, 38, 61-90.	1.4	2
67	Direct Methods in the Calculus of Variations (B. Dacorogna). SIAM Review, 1991, 33, 299-300.	9.5	1
68	Optimal design problems for SchrÃ¶dinger operators with noncompact resolvents. ESAIM - Control, Optimisation and Calculus of Variations, 2017, 23, 627-635.	1.3	1
69	A duality recipe for non-convex variational problems. Comptes Rendus - Mecanique, 2018, 346, 206-221.	2.1	0
70	Sensitivity of the Compliance and of the Wasserstein Distance with Respect to a Varying Source. Applied Mathematics and Optimization, 2019, 79, 743-768.	1.6	0
71	Homogenization of Arrays of Nanorods. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2010, 6, 735-739.	0.4	0