Bozhidar Velichkov

List of Publications by Year
in descending order

36	431	759233 12	794594 19
papers	citations	h-index	g-index

38	38	38	161
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Faberâ€“Krahn inequalities in sharp quantitative form. Duke Mathematical Journal, 2015, 164, .	1.5	55
2	Existence and Regularity of Minimizers for Some Spectral Functionals with Perimeter Constraint. Applied Mathematics and Optimization, 2014, 69, 199-231.	1.6	33
3	BV Estimates in Optimal Transportation and Applications. Archive for Rational Mechanics and Analysis, 2016, 219, 829-860.	2.4	26
4	Lipschitz Regularity of the Eigenfunctions on Optimal Domains. Archive for Rational Mechanics and Analysis, 2015, 216, 117-151.	2.4	25
5	Regularity of the optimal sets for some spectral functionals. Geometric and Functional Analysis, 2017, 27, 373-426.	1.8	24
6	Multiphase Shape Optimization Problems. SIAM Journal on Control and Optimization, 2014, 52, 3556-3591.	2.1	21
7	A logarithmic epiperimetric inequality for the obstacle problem. Geometric and Functional Analysis, 2018, 28, 1029-1061.	1.8	19
8	Direct Epiperimetric Inequalities for the Thin Obstacle Problem and Applications. Communications on Pure and Applied Mathematics, 2020, 73, 384-420.	3.1	17
9	A Multiphase Shape Optimization Problem for Eigenvalues: Qualitative Study and Numerical Results. SIAM Journal on Numerical Analysis, 2016, 54, 210-241.	2.3	14
10	An Epiperimetric Inequality for the Regularity of Some Free Boundary Problems: The 2â€Dimensional Case. Communications on Pure and Applied Mathematics, 2019, 72, 375-421.	3.1	14
11	Spectral Optimization Problems for Potentials and Measures. SIAM Journal on Mathematical Analysis, 2014, 46, 2956-2986.	1.9	13
12	Existence and Regularity Results for Some Shape Optimization Problems. , 2015, , .		13
13	Spectral optimization problems with internal constraint. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2013, 30, 477-495.	1.4	12
14	Regularity of the free boundary for the vectorial Bernoulli problem. Analysis and PDE, 2020, 13, 741-764.	1.4	12
15	Numerical Calibration of Steiner trees. Applied Mathematics and Optimization, 2019, 79, 69-86.	1.6	11
16	Existence and regularity of optimal shapes for elliptic operators with drift. Calculus of Variations and Partial Differential Equations, 2019, 58, 1.	1.7	11
17	On the honeycomb conjecture for a class of minimal convex partitions. Transactions of the American Mathematical Society, 2018, 370, 7149-7179.	0.9	10
18	Optimal potentials for SchrÃ¶dingerÂoperators. Journal De L'Ecole Polytechnique - Mathematiques, 0, 1, 71-100.	0.0	9

#	Article	IF	Citations
19	Shape optimization problems on metric measure spaces. Journal of Functional Analysis, 2013, 264, 1-33.	1.4	8
20	Regularity of minimizers of shape optimization problems involving perimeter. Journal Des Mathematiques Pures Et Appliquees, 2018, 109, 147-181.	1.6	7
21	Uniqueness of the blowup at isolated singularities for the Altâ€“Caffarelli functional. Duke Mathematical Journal, 2020, 169, .	1.5	7
22	(Log-)epiperimetric inequality and regularity over smooth cones for almost area-minimizing currents. Geometry and Topology, 2019, 23, 513-540.	1.3	6
23	Free boundary regularity for a multiphase shape optimization problem. Communications in Partial Differential Equations, 2020, 45, 77-108.	2.2	6
24	Regularity of the free boundary for the two-phase Bernoulli problem. Inventiones Mathematicae, 2021, 225, 347-394.	2.5	6
25	A note on the monotonicity formula of Caffarelliâ€“Jerisonâ€“Kenig. Atti Della Accademia Nazionale Dei Lincei, Classe Di Scienze Fisiche, Matematiche E Naturali, Rendiconti Lincei Matematica E Applicazioni, 2014, 25, 165-189.	0.6	5
26	Shape optimization problems for metric graphs. ESAIM - Control, Optimisation and Calculus of Variations, 2014, 20, 1-22.	1.3	5
27	Worst-case shape optimization for the Dirichlet energy. Nonlinear Analysis: Theory, Methods & Applications, 2017, 153, 117-129.	1.1	5
28	A Shape Optimal Control Problem with Changing Sign Data. SIAM Journal on Mathematical Analysis, 2018, 50, 2608-2627.	1.9	5
29	Serrin-type theorems for triangles. Proceedings of the American Mathematical Society, 2019, 147, 1615-1626.	0.8	4
30	A free boundary problem arising in PDE optimization. Calculus of Variations and Partial Differential Equations, 2015, 54, 3829-3856.	1.7	3
31	A free boundary approach to shape optimization problems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140273.	3.4	2
32	On the asymptotic behavior of the solutions to parabolic variational inequalities. Journal Fur Die Reine Und Angewandte Mathematik, 2020, 2020, 149-182.	0.9	2
33	Some new problems in spectral optimization. Banach Center Publications, 0, 101, 19-35.	0.1	2
34	Optimal Potentials for Problems with Changing Sign Data. Journal of Optimization Theory and Applications, 2018, 178, 743-762.	1.5	1
35	On the logarithmic epiperimetric inequality for the obstacle problem. Mathematics in Engineering, 2021, 3, 1-42.	0.9	1
36	Decay Estimates for the Supercritical 3-D SchrÃ¶dinger Equation with Rapidly Decreasing Potential. Progress in Mathematics, 2012, , 145-162.	0.3	1