

# Valeriy Slastikov

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

910  
citations

393982

19  
h-index

476904

29  
g-index

50  
all docs

50  
docs citations

50  
times ranked

553  
citing authors

#	ARTICLE	IF	CITATIONS
1	Symmetry Properties of Minimizers of a Perturbed Dirichlet Energy with a Boundary Penalization. SIAM Journal on Mathematical Analysis, 2022, 54, 3636-3653.	0.9	3
2	Domain walls in the coupled Gross-Pitaevskii equations with the harmonic potential. Calculus of Variations and Partial Differential Equations, 2022, 61, .	0.9	1
3	An estimate of the blow-up of Lebesgue norms in the non-tempered case. Journal of Mathematical Analysis and Applications, 2021, 493, 124550.	0.5	2
4	Chiral magnetism: a geometric perspective. SciPost Physics, 2021, 10, .	1.5	12
5	Topics in the mathematical design of materials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200108.	1.6	1
6	Landau-de Gennes Corrections to the Oseen-Frank Theory of Nematic Liquid Crystals. Archive for Rational Mechanics and Analysis, 2020, 236, 1089-1125.	1.1	8
7	Variational Principles of Micromagnetics Revisited. SIAM Journal on Mathematical Analysis, 2020, 52, 3580-3599.	0.9	29
8	Symmetry and Multiplicity of Solutions in a Two-Dimensional Landau-de Gennes Model for Liquid Crystals. Archive for Rational Mechanics and Analysis, 2020, 237, 1421-1473.	1.1	8
9	Dynamics of ferromagnetic domain walls under extreme fields. Physical Review B, 2020, 101, .	1.1	1
10	Edge Domain Walls in Ultrathin Exchange-Biased Films. Journal of Nonlinear Science, 2020, 30, 1165-1205.	1.0	3
11	On the uniqueness of minimisers of Ginzburg-Landau functionals. Annales Scientifiques De L'Ecole Normale Supérieure, 2020, 53, 589-613.	0.2	9
12	On a Sharp Poincaré-Type Inequality on the 2-Sphere and its Application in Micromagnetics. SIAM Journal on Mathematical Analysis, 2019, 51, 3373-3387.	0.9	11
13	Walker solution for Dzyaloshinskii domain wall in ultrathin ferromagnetic films. Physical Review B, 2019, 99, .	1.1	15
14	Reduced Models for Ferromagnetic Thin Films with Periodic Surface Roughness. Journal of Nonlinear Science, 2018, 28, 513-542.	1.0	5
15	Existence of travelling-wave solutions representing domain wall motion in a thin ferromagnetic nanowire. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2018, 148, 395-407.	0.8	0
16	Limit Shapes for Gibbs Ensembles of Partitions. Journal of Statistical Physics, 2018, 172, 1545-1563.	0.5	4
17	Uniqueness of degree-one Ginzburg-Landau vortex in the unit ball in dimensions $N \leq 7$ . Comptes Rendus Mathématique, 2018, 356, 922-926.	0.1	6
18	One-dimensional in-plane edge domain walls in ultrathin ferromagnetic films. Nonlinearity, 2018, 31, 728-754.	0.6	4

#	ARTICLE	IF	CITATIONS
19	Domain structure of ultrathin ferromagnetic elements in the presence of Dzyaloshinskii-Moriya interaction. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160666.	1.0	20
20	Magnetization in narrow ribbons: curvature effects. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 385401.	0.7	40
21	Engineering Curvature-Induced Anisotropy in Thin Ferromagnetic Films. Physical Review Letters, 2017, 119, 077203.	2.9	24
22	Theory of the Dzyaloshinskii domain-wall tilt in ferromagnetic nanostrips. Physical Review B, 2017, 96, .	1.1	24
23	Liquid crystal defects in the Landau-de Gennes theory in two dimensions – Beyond the one-constant approximation. Mathematical Models and Methods in Applied Sciences, 2016, 26, 2769-2808.	1.7	20
24	Stability of point defects of degree $\pm 1, 2$ in a two-dimensional nematic liquid crystal model. Calculus of Variations and Partial Differential Equations, 2016, 55, 1.	0.9	24
25	Dzyaloshinskii-Moriya domain walls in magnetic nanotubes. Physical Review B, 2016, 93, .	1.1	19
26	Instability of point defects in a two-dimensional nematic liquid crystal model. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2016, 33, 1131-1152.	0.7	25
27	Half-Integer Point Defects in the Q-Tensor Theory of Nematic Liquid Crystals. Journal of Nonlinear Science, 2016, 26, 121-140.	1.0	25
28	Stability of the Melting Hedgehog in the Landau-de Gennes Theory of Nematic Liquid Crystals. Archive for Rational Mechanics and Analysis, 2015, 215, 633-673.	1.1	49
29	Geometrically induced phase transitions in two-dimensional dumbbell-shaped domains. Journal of Differential Equations, 2015, 259, 1560-1605.	1.1	1
30	Diffusive transport in two-dimensional nematics. Discrete and Continuous Dynamical Systems - Series S, 2015, 8, 323-340.	0.6	0
31	Dynamic cohesive fracture: Models and analysis. Mathematical Models and Methods in Applied Sciences, 2014, 24, 1857-1875.	1.7	4
32	Domain wall motion in thin ferromagnetic nanotubes: Analytic results. Europhysics Letters, 2014, 105, 67006.	0.7	11
33	Uniqueness Results for an ODE Related to a Generalized Ginzburg-Landau Model for Liquid Crystals. SIAM Journal on Mathematical Analysis, 2014, 46, 3390-3425.	0.9	24
34	Fast domain-wall propagation in uniaxial nanowires with transverse fields. Physical Review B, 2013, 88, .	1.1	19
35	Domain wall motion in magnetic nanowires: an asymptotic approach. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130308.	1.0	25
36	Stability of the vortex defect in the Landau-de Gennes theory for nematic liquid crystals. Comptes Rendus Mathematique, 2013, 351, 533-537.	0.1	13

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37	Reduced models for ferromagnetic nanowires. IMA Journal of Applied Mathematics, 2012, 77, 220-235.	0.8	46
38	Geometrically Constrained Walls in Two Dimensions. Archive for Rational Mechanics and Analysis, 2012, 203, 621-692.	1.1	3
39	Stability of precessing domain walls in ferromagnetic nanowires. Physical Review B, 2011, 84, .	1.1	11
40	A note on configurational anisotropy. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 3167-3179.	1.0	3
41	Domain-Wall Motion in Ferromagnetic Nanowires Driven by Arbitrary Time-Dependent Fields: An Exact Result. Physical Review Letters, 2010, 104, 147202.	2.9	26
42	Vortices in two-dimensional nematics. Communications in Mathematical Sciences, 2009, 7, 917-938.	0.5	11
43	On spatial variations of nematic ordering. Physica D: Nonlinear Phenomena, 2008, 237, 2577-2586.	1.3	11
44	Surfactants in Foam Stability: A Phase-Field Model. Archive for Rational Mechanics and Analysis, 2007, 183, 411-456.	1.1	38
45	Geometrically constrained walls. Calculus of Variations and Partial Differential Equations, 2006, 28, 33-57.	0.9	7
46	Another Thin-Film Limit of Micromagnetics. Archive for Rational Mechanics and Analysis, 2005, 178, 227-245.	1.1	95
47	Critical points of the Onsager functional on a sphere. Nonlinearity, 2005, 18, 2565-2580.	0.6	73
48	MICROMAGNETICS OF THIN SHELLS. Mathematical Models and Methods in Applied Sciences, 2005, 15, 1469-1487.	1.7	33
49	Effective dynamics for ferromagnetic thin films: a rigorous justification. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2005, 461, 143-154.	1.0	40
50	A Note on the Onsager Model of Nematic Phase Transitions. Communications in Mathematical Sciences, 2005, 3, 21-26.	0.5	24