

Valeriy Slastikov

List of Publications by Year in descending order

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50
papers

910
citations

393982

19
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476904

29
g-index

50
all docs

50
docs citations

50
times ranked

553
citing authors

#	ARTICLE	IF	CITATIONS
1	Another Thin-Film Limit of Micromagnetics. Archive for Rational Mechanics and Analysis, 2005, 178, 227-245.	1.1	95
2	Critical points of the Onsager functional on a sphere. Nonlinearity, 2005, 18, 2565-2580.	0.6	73
3	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
4	Reduced models for ferromagnetic nanowires. IMA Journal of Applied Mathematics, 2012, 77, 220-235.	0.8	46
5	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
6	Magnetization in narrow ribbons: curvature effects. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 385401.	0.7	40
7	Surfactants in Foam Stability: A Phase-Field Model. Archive for Rational Mechanics and Analysis, 2007, 183, 411-456.	1.1	38
8	MICROMAGNETICS OF THIN SHELLS. Mathematical Models and Methods in Applied Sciences, 2005, 15, 1469-1487.	1.7	33
9	Variational Principles of Micromagnetics Revisited. SIAM Journal on Mathematical Analysis, 2020, 52, 3580-3599.	0.9	29
10	Domain-Wall Motion in Ferromagnetic Nanowires Driven by Arbitrary Time-Dependent Fields: An Exact Result. Physical Review Letters, 2010, 104, 147202.	2.9	26
11	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
12	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
13	Half-Integer Point Defects in the Q-Tensor Theory of Nematic Liquid Crystals. Journal of Nonlinear Science, 2016, 26, 121-140.	1.0	25
14	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
15	Stability of point defects of degree ± 1 in a two-dimensional nematic liquid crystal model. Calculus of Variations and Partial Differential Equations, 2016, 55, 1.	0.9	24
16	Engineering Curvature-Induced Anisotropy in Thin Ferromagnetic Films. Physical Review Letters, 2017, 119, 077203.	2.9	24
17	Theory of the Dzyaloshinskii domain-wall tilt in ferromagnetic nanostrips. Physical Review B, 2017, 96, .	1.1	24
18	A Note on the Onsager Model of Nematic Phase Transitions. Communications in Mathematical Sciences, 2005, 3, 21-26.	0.5	24

#	ARTICLE	IF	CITATIONS
19	Liquid crystal defects in the Landau-de Gennes theory in two dimensions "Beyond the one-constant approximation. <i>Mathematical Models and Methods in Applied Sciences</i> , 2016, 26, 2769-2808.	1.7	20
20	Domain structure of ultrathin ferromagnetic elements in the presence of Dzyaloshinskii-Moriya interaction. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017, 473, 20160666.	1.0	20
21	Fast domain-wall propagation in uniaxial nanowires with transverse fields. <i>Physical Review B</i> , 2013, 88, .	1.1	19
22	Dzyaloshinskii-Moriya domain walls in magnetic nanotubes. <i>Physical Review B</i> , 2016, 93, .	1.1	19
23	Walker solution for Dzyaloshinskii domain wall in ultrathin ferromagnetic films. <i>Physical Review B</i> , 2019, 99, .	1.1	15
24	Stability of the vortex defect in the Landau-de Gennes theory for nematic liquid crystals. <i>Comptes Rendus Mathematique</i> , 2013, 351, 533-537.	0.1	13
25	Chiral magnetism: a geometric perspective. <i>SciPost Physics</i> , 2021, 10, .	1.5	12
26	On spatial variations of nematic ordering. <i>Physica D: Nonlinear Phenomena</i> , 2008, 237, 2577-2586.	1.3	11
27	Stability of precessing domain walls in ferromagnetic nanowires. <i>Physical Review B</i> , 2011, 84, .	1.1	11
28	Domain wall motion in thin ferromagnetic nanotubes: Analytic results. <i>Europhysics Letters</i> , 2014, 105, 67006.	0.7	11
29	On a Sharp Poincaré-Type Inequality on the 2-Sphere and its Application in Micromagnetics. <i>SIAM Journal on Mathematical Analysis</i> , 2019, 51, 3373-3387.	0.9	11
30	Vortices in two-dimensional nematics. <i>Communications in Mathematical Sciences</i> , 2009, 7, 917-938.	0.5	11
31	On the uniqueness of minimisers of Ginzburg-Landau functionals. <i>Annales Scientifiques De L'Ecole Normale Supérieure</i> , 2020, 53, 589-613.	0.2	9
32	Landau-de Gennes Corrections to the Oseen-Frank Theory of Nematic Liquid Crystals. <i>Archive for Rational Mechanics and Analysis</i> , 2020, 236, 1089-1125.	1.1	8
33	Symmetry and Multiplicity of Solutions in a Two-Dimensional Landau-de Gennes Model for Liquid Crystals. <i>Archive for Rational Mechanics and Analysis</i> , 2020, 237, 1421-1473.	1.1	8
34	Geometrically constrained walls. <i>Calculus of Variations and Partial Differential Equations</i> , 2006, 28, 33-57.	0.9	7
35	Uniqueness of degree-one Ginzburg-Landau vortex in the unit ball in dimensions $N \leq 7$. <i>Comptes Rendus Mathematique</i> , 2018, 356, 922-926.	0.1	6
36	Reduced Models for Ferromagnetic Thin Films with Periodic Surface Roughness. <i>Journal of Nonlinear Science</i> , 2018, 28, 513-542.	1.0	5

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37	Dynamic cohesive fracture: Models and analysis. <i>Mathematical Models and Methods in Applied Sciences</i> , 2014, 24, 1857-1875.	1.7	4
38	Limit Shapes for Gibbs Ensembles of Partitions. <i>Journal of Statistical Physics</i> , 2018, 172, 1545-1563.	0.5	4
39	One-dimensional in-plane edge domain walls in ultrathin ferromagnetic films. <i>Nonlinearity</i> , 2018, 31, 728-754.	0.6	4
40	A note on configurational anisotropy. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2010, 466, 3167-3179.	1.0	3
41	Geometrically Constrained Walls in Two Dimensions. <i>Archive for Rational Mechanics and Analysis</i> , 2012, 203, 621-692.	1.1	3
42	Edge Domain Walls in Ultrathin Exchange-Biased Films. <i>Journal of Nonlinear Science</i> , 2020, 30, 1165-1205.	1.0	3
43	Symmetry Properties of Minimizers of a Perturbed Dirichlet Energy with a Boundary Penalization. <i>SIAM Journal on Mathematical Analysis</i> , 2022, 54, 3636-3653.	0.9	3
44	An estimate of the blow-up of Lebesgue norms in the non-tempered case. <i>Journal of Mathematical Analysis and Applications</i> , 2021, 493, 124550.	0.5	2
45	Geometrically induced phase transitions in two-dimensional dumbbell-shaped domains. <i>Journal of Differential Equations</i> , 2015, 259, 1560-1605.	1.1	1
46	Dynamics of ferromagnetic domain walls under extreme fields. <i>Physical Review B</i> , 2020, 101, .	1.1	1
47	Topics in the mathematical design of materials. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2021, 379, 20200108.	1.6	1
48	Domain walls in the coupled Grossâ€Pitaevskii equations with the harmonic potential. <i>Calculus of Variations and Partial Differential Equations</i> , 2022, 61, .	0.9	1
49	Existence of travelling-wave solutions representing domain wall motion in a thin ferromagnetic nanowire. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 2018, 148, 395-407.	0.8	0
50	Diffusive transport in two-dimensional nematics. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2015, 8, 323-340.	0.6	0