

# Gregory Seregin

## List of Publications by Year in descending order

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101  
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104  
docs citations

104  
times ranked

741  
citing authors

#	ARTICLE	IF	CITATIONS
1	On Type I Blowups of Suitable Weak Solutions to the Navier–Stokes Equations Near Boundary. Journal of Mathematical Sciences, 2022, 260, 52-62.	0.4	1
2	A Slightly Supercritical Condition of Regularity of Axisymmetric Solutions to the Navier–Stokes Equations. Journal of Mathematical Fluid Mechanics, 2022, 24, 1.	1.0	3
3	A Note on Local Regularity of Axisymmetric Solutions to the Navier–Stokes Equations. Journal of Mathematical Fluid Mechanics, 2022, 24, 1.	1.0	4
4	An approximation of forward self-similar solutions to the 3D Navier-Stokes system. Discrete and Continuous Dynamical Systems, 2021, 41, 4823.	0.9	0
5	On regularity properties of a surface growth model. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2021, 151, 1869-1892.	1.2	2
6	A note on weak solutions to the Navier–Stokes equations that are locally in $W^{2,3}_{loc}$ . St Petersburg Mathematical Journal, 2021, 32, 565-576.	0.4	0
7	Axisymmetric flows in the exterior of a cylinder. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2020, 150, 1671-1698.	1.2	5
8	Local regularity of axisymmetric solutions to the Navier–Stokes equations. Analysis and Mathematical Physics, 2020, 10, 1.	1.3	6
9	Sufficient conditions on Liouville type theorems for the 3D steady Navier–Stokes equations. St Petersburg Mathematical Journal, 2020, 31, 387-393.	0.4	18
10	Regularity of Solutions to the Navier–Stokes Equations in $\mathbb{R}^n_{\infty}$ . Journal of Mathematical Sciences, 2020, 244, 1003-1009.	0.4	3
11	Remarks on Liouville type theorems for steady-state Navier–Stokes equations. St Petersburg Mathematical Journal, 2019, 30, 321-328.	0.4	9
12	LlogL-Integrability of the Velocity Gradient for Stokes System with Drifts in $L^\infty(BMO^1)$ . Journal of Mathematical Sciences, 2019, 236, 399-412.	0.4	0
13	Time decay for solutions to the Stokes equations with drift. Communications in Contemporary Mathematics, 2018, 20, 1750046.	1.2	1
14	Liouville-type theorems for the Navier–Stokes equations. Russian Mathematical Surveys, 2018, 73, 661-724.	0.6	11
15	Regularity Criteria for Navier-Stokes Solutions. , 2018, , 829-867.		10
16	On stability of weak Navier–Stokes solutions with large $L^3$ -initial data. Communications in Partial Differential Equations, 2018, 43, 628-651.	2.2	8
17	On global weak solutions to the Cauchy problem for the Navier–Stokes equations with large $L^3$ -initial data. Nonlinear Analysis: Theory, Methods & Applications. 2017, 154, 269-296.	1.1	17
18	A necessary condition of potential blowup for the Navier–Stokes system in half-space. Mathematische Annalen, 2017, 369, 1327-1352.	1.4	13

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19	Remark on Wolf's Condition for Boundary Regularity of the Navier-Stokes Equations. Journal of Mathematical Sciences, 2017, 224, 468-474.	0.4	3
20	Liouville type theorem for stationary Navier-Stokes equations. Nonlinearity, 2016, 29, 2191-2195.	1.4	66
21	Regularity Criteria for Navier-Stokes Solutions. , 2016, , 1-38.		1
22	Ancient Solutions to Navier-Stokes Equations in Half Space. Journal of Mathematical Fluid Mechanics, 2015, 17, 551-575.	1.0	14
23	Liouville Theorem for 2D Navier-Stokes Equations in a Half Space. Journal of Mathematical Sciences, 2015, 210, 849-856.	0.4	10
24	Rescalings at possible singularities of Navier-Stokes equations in half-space. St Petersburg Mathematical Journal, 2014, 25, 815-833.	0.4	7
25	The real butterfly effect. Nonlinearity, 2014, 27, R123-R141.	1.4	74
26	A Liouville theorem for the Stokes system in a half-space. Journal of Mathematical Sciences, 2013, 195, 13-19.	0.4	4
27	Selected Topics of Local Regularity Theory for Navier-Stokes Equations. Lecture Notes in Mathematics, 2013, , 239-313.	0.2	4
28	Topics in Mathematical Fluid Mechanics. Lecture Notes in Mathematics, 2013, , .	0.2	13
29	Liouville theorems in unbounded domains for the time-dependent stokes system. Journal of Mathematical Physics, 2012, 53, .	1.1	12
30	A note on bounded scale-invariant quantities for the Navier-Stokes equations. Journal of Mathematical Sciences, 2012, 185, 742-745.	0.4	1
31	A Certain Necessary Condition of Potential Blow up for Navier-Stokes Equations. Communications in Mathematical Physics, 2012, 312, 833-845.	2.2	69
32	On divergence-free drifts. Journal of Differential Equations, 2012, 252, 505-540.	2.2	73
33	Necessary conditions of a potential blow-up for Navier-Stokes equations. Journal of Mathematical Sciences, 2011, 178, 345-352.	0.4	7
34	On a bounded shear flow in a half-space. Journal of Mathematical Sciences, 2011, 178, 353-356.	0.4	7
35	A note on local boundary regularity for the stokes system. Journal of Mathematical Sciences, 2010, 166, 86-90.	0.4	10
36	Global regularity of solutions of coupled Navier-Stokes equations and nonlinear Fokker Planck equations. Discrete and Continuous Dynamical Systems, 2010, 26, 1185-1196.	0.9	28

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37	On Type I Singularities of the Local Axi-Symmetric Solutions of the Navier–Stokes Equations. <i>Communications in Partial Differential Equations</i> , 2009, 34, 171-201.	2.2	68
38	To the 75th birthday of Vsevolod Alekseevich Solonnikov. <i>Journal of Mathematical Sciences</i> , 2009, 159, 385-390.	0.4	0
39	Reverse Hölder inequality for a class of suitable weak solutions to the Navier–Stokes equations. <i>Journal of Mathematical Sciences</i> , 2009, 159, 573-579.	0.4	0
40	Liouville theorems for the Navier–Stokes equations and applications. <i>Acta Mathematica</i> , 2009, 203, 83-105.	3.9	190
41	Existence of global solutions for a parabolic system related to the nonlinear Stokes problem. <i>Journal of Mathematical Sciences</i> , 2008, 152, 769-779.	0.4	2
42	New Sufficient Conditions of Local Regularity for Solutions to the Navier–Stokes Equations. <i>Journal of Mathematical Fluid Mechanics</i> , 2008, 10, 106-125.	1.0	17
43	Local Regularity Theory of the Navier–Stokes Equations. <i>Handbook of Mathematical Fluid Dynamics</i> , 2007, 4, 159-200.	0.1	9
44	Local regularity for suitable weak solutions of the Navier-Stokes equations. <i>Russian Mathematical Surveys</i> , 2007, 62, 595-614.	0.6	16
45	A Sufficient Condition of Regularity for Axially Symmetric Solutions to the Navier–Stokes Equations. <i>SIAM Journal on Mathematical Analysis</i> , 2007, 39, 669-685.	1.9	16
46	A global nonlinear evolution problem for generalized Newtonian fluids: Local initial regularity of the strong solution. <i>Computers and Mathematics With Applications</i> , 2007, 53, 509-520.	2.7	5
47	Navier–Stokes Equations: Almost $L^3$ -Case. <i>Journal of Mathematical Fluid Mechanics</i> , 2007, 9, 34-43.	1.0	16
48	Sufficient condition of local regularity for the Navier-Stokes equations. <i>Journal of Mathematical Sciences</i> , 2007, 143, 2869-2874.	0.4	8
49	Estimates of suitable weak solutions to the Navier-Stokes equations in critical Morrey spaces. <i>Journal of Mathematical Sciences</i> , 2007, 143, 2961-2968.	0.4	26
50	Nina Nikolaevna Uraltseva. To the 70th Anniversary of Her Birthday. <i>Journal of Mathematical Sciences</i> , 2006, 132, 249-254.	0.4	0
51	Partial Boundary Regularity for the Navier-Stokes Equations. <i>Journal of Mathematical Sciences</i> , 2006, 132, 339-358.	0.4	12
52	New version of the Ladyzhenskaya–Prodi–Serrin condition. <i>St Petersburg Mathematical Journal</i> , 2006, 18, 89-103.	0.4	4
53	On smoothness of $L^3$ -solutions to the Navier–Stokes equations up to boundary. <i>Mathematische Annalen</i> , 2005, 332, 219-238.	1.4	44
54	Remarks on the regularity of weak solutions to the Navier-Stokes equations near the boundary. <i>Journal of Mathematical Sciences</i> , 2005, 127, 1915-1922.	0.4	1

#	ARTICLE	IF	CITATIONS
55	To the Jubilee of Vsevolod Alekseevich Solonnikov. Journal of Mathematical Sciences, 2005, 130, 4775-4779.	0.4	0
56	On Smoothness of Suitable Weak Solutions to the Navier-Stokes Equations. Journal of Mathematical Sciences, 2005, 130, 4884-4892.	0.4	18
57	Regularity results for parabolic systems related to a class of non-Newtonian fluids. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2004, 21, 25-60.	1.4	123
58	Backward Uniqueness for Parabolic Equations. Archive for Rational Mechanics and Analysis, 2003, 169, 147-157.	2.4	149
59	$L^3$ -solutions of the Navier-Stokes equations and backward uniqueness. Russian Mathematical Surveys, 2003, 58, 211-250.	0.6	298
60	Backward uniqueness for the heat operator in a half-space. St Petersburg Mathematical Journal, 2003, 15, 139-148.	0.4	21
61	Navier-Stokes Equations with Lower Bounds on the Pressure. Archive for Rational Mechanics and Analysis, 2002, 163, 65-86.	2.4	75
62	Local Regularity of Suitable Weak Solutions to the Navier-Stokes Equations Near the Boundary. Journal of Mathematical Fluid Mechanics, 2002, 4, 1-29.	1.0	86
63	Partial Regularity for Solutions of the Modified Navier-Stokes Equations. Journal of Mathematical Sciences, 2002, 109, 1984-1996.	0.4	0
64	Title is missing!. Journal of Mathematical Sciences, 2002, 109, 1911-1927.	0.4	2
65	The Navier-Stokes Equations and Backward Uniqueness. International Mathematical Series, 2002, , 353-366.	0.3	23
66	Local regularity of solutions of variational problems for the equilibrium configuration of an incompressible, multiphase elastic body. Nonlinear Differential Equations and Applications, 2001, 8, 53-81.	0.8	2
67	On the number of singular points of weak solutions to the Navier-Stokes equations. Communications on Pure and Applied Mathematics, 2001, 54, 1019-1028.	3.1	28
68	Global Existence of Weak Solutions for Viscous Incompressible Flows around a Moving Rigid Body in Three Dimensions. Journal of Mathematical Fluid Mechanics, 2000, 2, 219-266.	1.0	118
69	Regularity for minimizers of some variational problems in plasticity theory. Journal of Mathematical Sciences, 2000, 99, 969-988.	0.4	4
70	Attractors for equations describing the flow of generalized Newtonian fluids. Journal of Mathematical Sciences, 2000, 101, 3539-3562.	0.4	0
71	Variational Methods for Problems from Plasticity Theory and for Generalized Newtonian Fluids. Lecture Notes in Mathematics, 2000, , .	0.2	130
72	Full regularity for a class of degenerated parabolic systems in two spatial variables. Manuscripta Mathematica, 1999, 99, 517-539.	0.6	6

#	ARTICLE	IF	CITATIONS
73	On Partial Regularity of Suitable Weak Solutions to the Three-Dimensional Navier–Stokes equations. <i>Journal of Mathematical Fluid Mechanics</i> , 1999, 1, 356-387.	1.0	214
74	Remarks on regularity up to the boundary for solutions to variational problems in plasticity theory. <i>Journal of Mathematical Sciences</i> , 1999, 93, 779-783.	0.4	10
75	Variational methods for fluids of Prandtl-Eyring type and plastic materials with logarithmic hardening. <i>Mathematical Methods in the Applied Sciences</i> , 1999, 22, 317-351.	2.3	32
76	A regularity theory for variational integrals with $\ln L$ -Growth. <i>Calculus of Variations and Partial Differential Equations</i> , 1998, 6, 171-187.	1.7	40
77	Regularity results for the quasi-static Bingham variational inequality in dimensions two and three. <i>Mathematische Zeitschrift</i> , 1998, 227, 525-541.	0.9	26
78	Smoothness of solutions of equations describing generalized Newtonian flows and estimates for the dimensions of their attractors. <i>Izvestiya Mathematics</i> , 1998, 62, 55-113.	0.6	5
79	Some Remarks on Non-Newtonian Fluids Including Nonconvex Perturbations of the Bingham and Powell–Eyring Model for Viscoplastic Fluids. <i>Mathematical Models and Methods in Applied Sciences</i> , 1997, 07, 405-433.	3.3	14
80	Some remarks on the mollification of piecewise-linear homeomorphisms. <i>Journal of Mathematical Sciences</i> , 1997, 87, 3428-3433.	0.4	4
81	Some remarks on variational problems for functionals with $\ln L$ growth. <i>Journal of Mathematical Sciences</i> , 1997, 84, 919-929.	0.4	2
82	The uniqueness of solutions of some variational problems of the theory of phase equilibrium in solid bodies. <i>Journal of Mathematical Sciences</i> , 1996, 80, 2333-2348.	0.4	6
83	Two-dimensional variational problems of the theory of plasticity. <i>Izvestiya Mathematics</i> , 1996, 60, 179-216.	0.6	10
84	A Dual Finite Element Approach for Stresses of Elasto-Perfectly Plastic Bodies. <i>Mathematics of Computation</i> , 1995, 64, 1455.	2.1	0
85	A dual finite element approach for stresses of elasto-perfectly plastic bodies. <i>Mathematics of Computation</i> , 1995, 64, 1455-1462.	2.1	1
86	Error estimates for stresses in the finite element analysis of the two-dimensional elasto-plastic problems. <i>International Journal of Engineering Science</i> , 1995, 33, 255-268.	5.0	9
87	On one method of approximation of initial boundary value problems for the Navier-Stokes equations. <i>Journal of Mathematical Sciences</i> , 1995, 75, 2038-2057.	0.4	2
88	A local estimate of the maximum of the module of the deviator of the strain tensor in an elastoplastic body with linear hardening. <i>Journal of Mathematical Sciences</i> , 1995, 77, 3243-3249.	0.4	0
89	ABOUT OPTIMAL SHAPE DESIGN IN FLUID DYNAMICS. <i>Optimal Control Applications and Methods</i> , 1995, 16, 143-148.	2.1	1
90	Differential properties of solutions of evolution variational inequalities in the theory of plasticity. <i>Journal of Mathematical Sciences</i> , 1994, 72, 3449-3458.	0.4	6

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91	On a dynamical system generated by the two-dimensional equations of the motion of a Bingham fluid. Journal of Mathematical Sciences, 1994, 70, 1806-1816.	0.4	13
92	Differentiability properties of weak solutions of certain variational problems in the theory of perfect elastoplastic plates. Applied Mathematics and Optimization, 1993, 28, 307-335.	1.6	13
93	Differential properties of solutions of variational problems for functionals of linear growth. Journal of Soviet Mathematics, 1993, 64, 1256-1277.	0.0	8
94	On a variational difference scheme for problems of limiting equilibrium. USSR Computational Mathematics and Mathematical Physics, 1987, 27, 53-59.	0.0	0
95	Formulations of the problems of the theory of an ideally elastic-plastic body. Prikladnaya Matematika I Mekhanika, 1985, 49, 651-659.	0.4	0
96	Variation-difference schemes for problems in the mechanics of ideally elastoplastic media. USSR Computational Mathematics and Mathematical Physics, 1985, 25, 153-165.	0.0	8
97	VARIATIONAL PROBLEMS AND EVOLUTION VARIATIONAL INEQUALITIES IN NONREFLEXIVE SPACES WITH APPLICATIONS TO PROBLEMS OF GEOMETRY AND PLASTICITY. Mathematics of the USSR Izvestija, 1985, 24, 391-414.	0.2	1
98	Variational formulations of certain problems of the theory of the flow of rigid-plastic media. Prikladnaya Matematika I Mekhanika, 1984, 48, 728-731.	0.4	0
99	Extension of the variational formulation of the problem for a rigid-plastic medium to velocity fields with slip-type discontinuities. Prikladnaya Matematika I Mekhanika, 1983, 47, 820-827.	0.4	2
100	On the best position of elastic symmetry planes in an orthotropic body. Prikladnaya Matematika I Mekhanika, 1981, 45, 139-142.	0.4	11
101	Leray-Hopf solutions to Navier-Stokes equations with weakly converging initial data. , 0, , 251-258.		6