Michael Ruzicka

List of Publications by Year
in descending order

37	2,131	686830 13	414034 32
papers	citations	h-index	g-index

37	37	37	721
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lebesgue and Sobolev Spaces with Variable Exponents. Lecture Notes in Mathematics, 2011, , .	0.1	1,232
2	A decomposition technique for John domains. Annales Academiae Scientiarum Fennicae Mathematica, 2010, 35, 87-114.	0.7	109
3	An example of a space Lp(x) on which the Hardy-Littlewood maximal operator is not bounded. , 2001, 19, 369-371.		105
4	ON THE NON-NEWTONIAN INCOMPRESSIBLE FLUIDS. Mathematical Models and Methods in Applied Sciences, 1993, 03, 35-63.	1.7	89
5	Modeling, Mathematical and Numerical Analysis of Electrorheological Fluids. Applications of Mathematics, 2004, 49, 565-609.	0.9	80
6	Existence of Strong Solutions for Incompressible Fluids with Shear Dependent Viscosities. Journal of Mathematical Fluid Mechanics, 2010, 12, 101-132.	0.4	76
7	Strong Solutions for Generalized Newtonian Fluids. Journal of Mathematical Fluid Mechanics, 2005, 7, 413-450.	0.4	70
8	Weak Solutions for an Incompressible Newtonian Fluid Interacting with a Koiter Type Shell. Archive for Rational Mechanics and Analysis, 2014, 211, 205-255.	1.1	59
9	Optimal Convergence for the Implicit Spaceâ€Time Discretization of Parabolic Systems with pâ€Structure. SIAM Journal on Numerical Analysis, 2007, 45, 457-472.	1.1	49
10	Boundary Regularity of Shear Thickening Flows. Journal of Mathematical Fluid Mechanics, 2011, 13, 387-404.	0.4	47
11	Semiâ€implicit Euler Scheme for Generalized Newtonian Fluids. SIAM Journal on Numerical Analysis, 2006, 44, 1172-1190.	1.1	23
12	Large Data Existence Result for Unsteady Flows of Inhomogeneous Shear-Thickening Heat-Conducting Incompressible Fluids. Communications in Partial Differential Equations, 2010, 35, 1891-1919.	1.0	23
13	On Fully Implicit Space-Time Discretization for Motions of Incompressible Fluids with Shear-Dependent Viscosities: The Case $p le 2 $. SIAM Journal on Numerical Analysis, 2001, 39, 214-249.	1.1	19
14	Non-homogeneous generalized Newtonian fluids. Mathematische Zeitschrift, 2008, 260, 355-375.	0.4	19
15	Global regularity properties of steady shear thinning flows. Journal of Mathematical Analysis and Applications, 2017, 450, 839-871.	0.5	13
16	Global regularity for systems with p-structure depending on the symmetric gradient. Advances in Nonlinear Analysis, 2020, 9, 176-192.	1.3	12
17	Steady flows of Cosseratâ€“Bingham fluids. Mathematical Methods in the Applied Sciences, 2017, 40, 2746-2761.	1.2	10
18	Optimal Error Estimates for a Semi-Implicit Euler Scheme for Incompressible Fluids with Shear Dependent Viscosities. SIAM Journal on Numerical Analysis, 2009, 47, 2177-2202.	1.1	9

#	Article	IF	Citations
19	Local discontinuous Galerkin numerical solutions of non-Newtonian incompressible flows modeled by p-Navierâ€“Stokes equations. Journal of Computational Physics, 2014, 270, 182-202.	1.9	9
20	Optimal error estimate for semi-implicit space-time discretization for the equations describing incompressible generalized Newtonian fluids. IMA Journal of Numerical Analysis, 2015, 35, 680-697.	1.5	8
21	Regularity theorems, up to the boundary, for shear thickening flows. Comptes Rendus Mathematique, 2010, 348, 541-544.	0.1	7
22	Numerical solutions of systems with (p,Î´)â€structure using local discontinuous Galerkin finite element methods. International Journal for Numerical Methods in Fluids, 2014, 76, 855-874.	0.9	7
23	On the Full Space-Time Discretization of the Generalized Stokes Equations: The Dirichlet Case. SIAM Journal on Numerical Analysis, 2018, 56, 2234-2261.	1.1	7
24	Analysis of Generalized Newtonian Fluids. Lecture Notes in Mathematics, 2013, , 199-238.	0.1	7
25	Spaceâ€“time discretization for nonlinear parabolic systems withp-structure. IMA Journal of Numerical Analysis, 2022, 42, 260-299.	1.5	7
26	Existence of Weak Solutions for Unsteady Motions of Herschelâ€“Bulkley Fluids. Journal of Mathematical Fluid Mechanics, 2012, 14, 485-500.	0.4	6
27	Convergence of Fully Discrete Implicit and Semi-implicit Approximations of Singular Parabolic Equations. SIAM Journal on Numerical Analysis, 2020, 58, 811-833.	1.1	6
28	The Oberbeckâ€“Boussinesq approximation as a constitutive limit. Continuum Mechanics and Thermodynamics, 2016, 28, 1411-1419.	1.4	5
29	Natural second-order regularity for parabolic systems with operators having $$(p,delta) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 3 Differential Equations, 2022, 61, .	0.9	5
30	Analysis of fully discrete, quasi non-conforming approximations of evolution equations and applications. Mathematical Models and Methods in Applied Sciences, 0, , 1-47.	1.7	4
31	Solenoidal difference quotients and their application to the regularity theory of the p-Stokes system. Calculus of Variations and Partial Differential Equations, 2020, 59, 1.	0.9	3
32	On Time-Discretizations for Generalized Newtonian Fluids. International Mathematical Series, 2002, , 89-118.	0.3	3
33	A limit problem in natural convection. Nonlinear Differential Equations and Applications, 2006, 13, 447-467.	0.4	2
34	Generalized Newtonian fluids in moving domains. Journal of Differential Equations, 2018, 264, 835-866.	1.1	1
35	Global weak solutions for an newtonian fluid interacting with a Koiter type shell under natural boundary conditions. Discrete and Continuous Dynamical Systems - Series S, 2021, 14, 4093.	0.6	0
36	On the regularity of solution to the time-dependent p-Stokes system. Opuscula Mathematica, 2020, 40, 49-69.	0.3	0

#	Article	IF	Citations
37	Optimal error estimate for a space-time discretization for incompressible generalized Newtonian fluids: the Dirichlet problem. SN Partial Differential Equations and Applications, 2021, 2, 1.	0.3	0