

# Alexander Mielke

## List of Publications by Year in descending order

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187  
papers

6,967  
citations

57681

46  
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84171

75  
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197  
all docs

197  
docs citations

197  
times ranked

1698  
citing authors

#	ARTICLE	IF	CITATIONS
1	Traveling Fronts in a Reaction–Diffusion Equation with a Memory Term. <i>Journal of Dynamics and Differential Equations</i> , 2024, 36, 487-513.	1.0	1
2	Leray–Hopf solutions to a viscoelastoplastic fluid model with nonsmooth stress–strain relation. <i>Nonlinear Analysis: Real World Applications</i> , 2022, 65, 103491.	0.9	4
3	Global Existence Analysis of Energy-Reaction-Diffusion Systems. <i>SIAM Journal on Mathematical Analysis</i> , 2022, 54, 220-267.	0.9	4
4	On the existence of global-in-time weak solutions and scaling laws for Kolmogorov's two-equation model for turbulence. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2022, 102, .	0.9	4
5	On the Darwin–Howie–Whelan Equations for the Scattering of Fast Electrons Described by the Schrödinger Equation. <i>SIAM Journal on Applied Mathematics</i> , 2021, 81, 1552-1578.	0.8	2
6	A rigorous derivation and energetics of a wave equation with fractional damping. <i>Journal of Evolution Equations</i> , 2021, 21, 3079-3102.	0.6	2
7	EDP-convergence for nonlinear fast–slow reaction systems with detailed balance*. <i>Nonlinearity</i> , 2021, 34, 5762-5798.	0.6	7
8	Exploring families of energy-dissipation landscapes via tilting: three types of EDP convergence. <i>Continuum Mechanics and Thermodynamics</i> , 2021, 33, 611-637.	1.4	14
9	Linearized elasticity as Mosco limit of finite elasticity in the presence of cracks. <i>Advances in Calculus of Variations</i> , 2020, 13, 33-52.	0.7	0
10	Modeling of Chemical Reaction Systems with Detailed Balance Using Gradient Structures. <i>Journal of Statistical Physics</i> , 2020, 181, 2257-2303.	0.5	16
11	Coarse-graining via EDP-convergence for linear fast-slow reaction systems. <i>Mathematical Models and Methods in Applied Sciences</i> , 2020, 30, 1765-1807.	1.7	14
12	Thermoviscoelasticity in Kelvin–Voigt Rheology at Large Strains. <i>Archive for Rational Mechanics and Analysis</i> , 2020, 238, 1-45.	1.1	20
13	Multi-dimensional Modeling and Simulation of Semiconductor Nanophotonic Devices. <i>Springer Series in Solid-state Sciences</i> , 2020, , 241-283.	0.3	1
14	An existence result and evolutionary $\Gamma$ -convergence for perturbed gradient systems. <i>Journal of Evolution Equations</i> , 2019, 19, 479-522.	0.6	4
15	Geometric properties of cones with applications on the Hellinger–Kantorovich space, and a new distance on the space of probability measures. <i>Journal of Functional Analysis</i> , 2019, 276, 3529-3576.	0.7	11
16	A gradient system with a wiggly energy and relaxed EDP-convergence. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2019, 25, 68.	0.7	13
17	Decay to Equilibrium for Energy-Reaction-Diffusion Systems. <i>SIAM Journal on Mathematical Analysis</i> , 2018, 50, 1037-1075.	0.9	13
18	Global Existence Results for Viscoplasticity at Finite Strain. <i>Archive for Rational Mechanics and Analysis</i> , 2018, 227, 423-475.	1.1	17

#	ARTICLE	IF	CITATIONS
19	Optimal Entropy-Transport problems and a new Hellinger–Kantorovich distance between positive measures. <i>Inventiones Mathematicae</i> , 2018, 211, 969-1117.	1.3	105
20	Local control of globally competing patterns in coupled Swift–Hohenberg equations. <i>Chaos</i> , 2018, 28, 043121.	1.0	0
21	Convergence to Equilibrium in Energy-Reaction–Diffusion Systems Using Vector-Valued Functional Inequalities. <i>Journal of Nonlinear Science</i> , 2018, 28, 765-806.	1.0	8
22	Coexistence of Hamiltonian-Like and Dissipative Dynamics in Rings of Coupled Phase Oscillators with Skew-Symmetric Coupling. <i>SIAM Journal on Applied Dynamical Systems</i> , 2018, 17, 2076-2105.	0.7	14
23	Three Examples Concerning the Interaction of Dry Friction and Oscillations. <i>Springer INdAM Series</i> , 2018, , 159-177.	0.4	1
24	An Entropic Gradient Structure for Lindblad Equations and Couplings of Quantum Systems to Macroscopic Models. <i>Journal of Statistical Physics</i> , 2017, 167, 205-233.	0.5	31
25	Non-equilibrium Thermodynamical Principles for Chemical Reactions with Mass-Action Kinetics. <i>SIAM Journal on Applied Mathematics</i> , 2017, 77, 1562-1585.	0.8	27
26	Uniform Exponential Decay for Reaction-Diffusion Systems with Complex-Balanced Mass-Action Kinetics. <i>Springer Proceedings in Mathematics and Statistics</i> , 2017, , 149-171.	0.1	3
27	Uniform Asymptotic Expansions for the Fundamental Solution of Infinite Harmonic Chains. <i>Zeitschrift Fur Analysis Und Ihre Anwendung</i> , 2017, 36, 437-475.	0.8	1
28	Variational Methods for Evolution. <i>Oberwolfach Reports</i> , 2017, 14, 3185-3261.	0.0	0
29	On microscopic origins of generalized gradient structures. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2017, 10, 1-35.	0.6	11
30	Averaging of time-periodic dissipation potentials in rate-independent processes. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2017, 10, 1303-1327.	0.6	3
31	Balanced-Viscosity solutions for multi-rate systems. <i>Journal of Physics: Conference Series</i> , 2016, 727, 012010.	0.3	7
32	Balanced Viscosity (BV) solutions to infinite-dimensional rate-independent systems. <i>Journal of the European Mathematical Society</i> , 2016, 18, 2107-2165.	0.7	41
33	Optimal Transport in Competition with Reaction: The Hellinger–Kantorovich Distance and Geodesic Curves. <i>SIAM Journal on Mathematical Analysis</i> , 2016, 48, 2869-2911.	0.9	63
34	Existence, numerical convergence and evolutionary relaxation for a rate-independent phase-transformation model. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20150171.	1.6	2
35	A Generalization of Onsager’s Reciprocity Relations to Gradient Flows with Nonlinear Mobility. <i>Journal of Non-Equilibrium Thermodynamics</i> , 2016, 41, 141-149.	2.4	37
36	Rate-independent elastoplasticity at finite strains and its numerical approximation. <i>Mathematical Models and Methods in Applied Sciences</i> , 2016, 26, 2203-2236.	1.7	32

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37	On Evolutionary $\Gamma$ -Convergence for Gradient Systems. Lecture Notes in Applied Mathematics and Mechanics, 2016, , 187-249.	1.1	47
38	Deriving Effective Models for Multiscale Systems via Evolutionary $\Gamma$ -Convergence. Understanding Complex Systems, 2016, , 235-251.	0.3	6
39	Variational Methods for Evolution. Oberwolfach Reports, 2015, 11, 3177-3254.	0.0	0
40	In Memoriam Klaus Kirchg�ssner. Journal of Dynamics and Differential Equations, 2015, 27, 335-342.	1.0	0
41	On Uniform Decay of the Entropy for Reaction-Diffusion Systems. Journal of Dynamics and Differential Equations, 2015, 27, 897-928.	1.0	29
42	Global-in-time existence of weak solutions to Kolmogorov's two-equation model of turbulence. Comptes Rendus Mathematique, 2015, 353, 321-326.	0.1	9
43	Rate-Independent Systems. Applied Mathematical Sciences (Switzerland), 2015, , .	0.4	159
44	Global existence for a nonlocal and nonlinear Fokker-Planck equation. Zeitschrift Fur Angewandte Mathematik Und Physik, 2015, 66, 293-315.	0.7	9
45	Spectrum and amplitude equations for scalar delay-differential equations with large delay. Discrete and Continuous Dynamical Systems, 2015, 35, 537-553.	0.5	14
46	Rate-independent systems in Banach spaces. Applied Mathematical Sciences (Switzerland), 2015, , 117-234.	0.4	1
47	Variational Approaches and Methods for Dissipative Material Models with Multiple Scales. Lecture Notes in Applied and Computational Mechanics, 2015, , 125-155.	2.0	5
48	Deriving amplitude equations via evolutionary $\Gamma$ -convergence. Discrete and Continuous Dynamical Systems, 2015, 35, 2679-2700.	0.5	10
49	Energetic rate-independent systems. Applied Mathematical Sciences (Switzerland), 2015, , 45-115.	0.4	1
50	Beyond rate-independence. Applied Mathematical Sciences (Switzerland), 2015, , 459-577.	0.4	0
51	Applications in continuum mechanics and physics of solids. Applied Mathematical Sciences (Switzerland), 2015, , 235-458.	0.4	0
52	A general view of rate-independent systems. Applied Mathematical Sciences (Switzerland), 2015, , 1-43.	0.4	0
53	An Approach to Nonlinear Viscoelasticity via Metric Gradient Flows. SIAM Journal on Mathematical Analysis, 2014, 46, 1317-1347.	0.9	16
54	On the Relation between Gradient Flows and the Large-Deviation Principle, with Applications to Markov Chains and Diffusion. Potential Analysis, 2014, 41, 1293-1327.	0.4	103

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55	Two-scale homogenization of nonlinear reaction-diffusion systems with slow diffusion. <i>Networks and Heterogeneous Media</i> , 2014, 9, 353-382.	0.5	20
56	On the vanishing-viscosity limit in parabolic systems with rate-independent dissipation terms. <i>Annali Della Scuola Normale Superiore Di Pisa Classe Di Scienze</i> , 2014, , 67-135.	0.1	6
57	Geodesic convexity of the relative entropy in reversible Markov chains. <i>Calculus of Variations and Partial Differential Equations</i> , 2013, 48, 1-31.	0.9	93
58	A gradient structure for systems coupling reaction-diffusion effects in bulk and interfaces. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2013, 64, 29-52.	0.7	40
59	Nonsmooth analysis of doubly nonlinear evolution equations. <i>Calculus of Variations and Partial Differential Equations</i> , 2013, 46, 253-310.	0.9	57
60	HOMOGENIZATION OF ELASTIC WAVES IN FLUID-SATURATED POROUS MEDIA USING THE BIOT MODEL. <i>Mathematical Models and Methods in Applied Sciences</i> , 2013, 23, 873-916.	1.7	17
61	Linearized plasticity is the evolutionary $\Gamma$ -limit of finite plasticity. <i>Journal of the European Mathematical Society</i> , 2013, 15, 923-948.	0.7	27
62	Gradient structures and geodesic convexity for reaction-diffusion systems. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2013, 371, 20120346.	1.6	51
63	Dissipative Quantum Mechanics Using GENERIC. <i>Springer Proceedings in Mathematics and Statistics</i> , 2013, , 555-585.	0.1	7
64	Thermomechanical modeling of energy-reaction-diffusion systems, including bulk-interface interactions. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2013, 6, 479-499.	0.6	33
65	Preface: Rate-independent evolutions. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2013, 6, i-ii.	0.6	0
66	Neue Bücher aus Oberwolfach. <i>Mitteilungen Der Deutschen Mathematiker-Vereinigung</i> , 2012, 20, .	0.0	0
67	BV solutions and viscosity approximations of rate-independent systems. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2012, 18, 36-80.	0.7	83
68	Quasi-Static Small-Strain Plasticity in the Limit of Vanishing Hardening and Its Numerical Approximation. <i>SIAM Journal on Numerical Analysis</i> , 2012, 50, 951-976.	1.1	36
69	Variational Convergence of Gradient Flows and Rate-Independent Evolutions in Metric Spaces. <i>Milan Journal of Mathematics</i> , 2012, 80, 381-410.	0.7	25
70	Emergence of rate-independent dissipation from viscous systems with wiggly energies. <i>Continuum Mechanics and Thermodynamics</i> , 2012, 24, 591-606.	1.4	17
71	From Damage to Delamination in Nonlinearly Elastic Materials at Small Strains. <i>Journal of Elasticity</i> , 2012, 109, 235-273.	0.9	31
72	A model for the evolution of laminates in finite-strain elastoplasticity. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2012, 92, 888-909.	0.9	18

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73	Calculation of ultrashort pulse propagation based on rational approximations for medium dispersion. <i>Optical and Quantum Electronics</i> , 2012, 44, 241-246.	1.5	7
74	Passing to the limit in a Wasserstein gradient flow: from diffusion to reaction. <i>Calculus of Variations and Partial Differential Equations</i> , 2012, 44, 419-454.	0.9	37
75	Generalized Prandtl–Ishlinskii operators arising from homogenization and dimension reduction. <i>Physica B: Condensed Matter</i> , 2012, 407, 1330-1335.	1.3	9
76	From Discrete Visco-Elasticity to Continuum Rate-Independent Plasticity: Rigorous Results. <i>Archive for Rational Mechanics and Analysis</i> , 2012, 203, 577-619.	1.1	44
77	A gradient structure for reaction–diffusion systems and for energy-drift-diffusion systems. <i>Nonlinearity</i> , 2011, 24, 1329-1346.	0.6	168
78	Formulation of thermoelastic dissipative material behavior using GENERIC. <i>Continuum Mechanics and Thermodynamics</i> , 2011, 23, 233-256.	1.4	84
79	On thermodynamically consistent models and gradient structures for thermoplasticity. <i>GAMM Mitteilungen</i> , 2011, 34, 51-58.	2.7	9
80	Weighted energy-dissipation functionals for gradient flows. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2011, 17, 52-85.	0.7	28
81	AN EVOLUTIONARY ELASTOPLASTIC PLATE MODEL DERIVED VIA $\Gamma$ -CONVERGENCE. <i>Mathematical Models and Methods in Applied Sciences</i> , 2011, 21, 1961-1986.	1.7	20
82	Differential, Energetic, and Metric Formulations for Rate-Independent Processes. <i>Lecture Notes in Mathematics</i> , 2011, , 87-170.	0.1	40
83	Complete-damage evolution based on energies and stresses. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2011, 4, 423-439.	0.6	14
84	Complete damage in elastic and viscoelastic media and its energetics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 1242-1253.	3.4	39
85	Crack growth in polyconvex materials. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 1470-1484.	1.3	41
86	Pad $\hat{c}$ approximant for refractive index and nonlocal envelope equations. <i>Optics Communications</i> , 2010, 283, 480-485.	1.0	28
87	Damage of nonlinearly elastic materials at small strain – Existence and regularity results –. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2010, 90, 88-112.	0.9	70
88	Microstructures in Solids: From Quantum Models to Continua. <i>Oberwolfach Reports</i> , 2010, 7, 733-798.	0.0	0
89	Dispersive stability of infinite-dimensional Hamiltonian systems on lattices. <i>Applicable Analysis</i> , 2010, 89, 1493-1512.	0.6	14
90	High-frequency averaging in semi-classical Hartree-type equations. <i>Asymptotic Analysis</i> , 2010, 70, 87-100.	0.2	4

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91	Error Estimates for Space-Time Discretizations of a Rate-Independent Variational Inequality. SIAM Journal on Numerical Analysis, 2010, 48, 1625-1646.	1.1	25
92	Error Bounds for Space-Time Discretizations of a 3D Model for Shape-Memory Materials. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 185-197.	0.1	5
93	Existence Theory for Finite-Strain Crystal Plasticity with Gradient Regularization. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 171-183.	0.1	1
94	Numerical approaches to rate-independent processes and applications in inelasticity. ESAIM: Mathematical Modelling and Numerical Analysis, 2009, 43, 399-428.	0.8	36
95	Reverse Approximation of Energetic Solutions to Rate-Independent Processes. Nonlinear Differential Equations and Applications, 2009, 16, 17-40.	0.4	10
96	A complete-damage problem at small strains. Zeitschrift Fur Angewandte Mathematik Und Physik, 2009, 60, 205-236.	0.7	37
97	Global Existence for Rate-Independent Gradient Plasticity at Finite Strain. Journal of Nonlinear Science, 2009, 19, 221-248.	1.0	76
98	A Model for the Evolution of Laminates. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 43-46.	0.2	0
99	On Existence and Approximation for a 3D Model of Thermally Induced Phase Transformations in Shape-Memory Alloys. SIAM Journal on Mathematical Analysis, 2009, 41, 1388-1414.	0.9	23
100	Multi-pulse evolution and space-time chaos in dissipative systems. Memoirs of the American Mathematical Society, 2009, 198, 0-0.	0.5	22
101	A metric approach to a class of doubly nonlinear evolution equations and applications. Annali Della Scuola Normale Superiore Di Pisa Classe Di Scienze, 2009, , 97-169.	0.1	14
102	Modeling solutions with jumps for rate-independent systems on metric spaces. Discrete and Continuous Dynamical Systems, 2009, 25, 585-615.	0.5	68
103	Convergence of solutions of kinetic variational inequalities in the rate-independent quasi-static limit. Journal of Mathematical Analysis and Applications, 2008, 348, 1012-1020.	0.5	10
104	$\Gamma$ -limits and relaxations for rate-independent evolutionary problems. Calculus of Variations and Partial Differential Equations, 2008, 31, 387-416.	0.9	149
105	On rate independent models for crack propagation. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10213-10214.	0.2	0
106	Existence and approximation for a 3D model of thermally-induced phase transformations in shape-memory alloys. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10395-10396.	0.2	3
107	Energy release rate for cracks in finite-strain elasticity. Mathematical Methods in the Applied Sciences, 2008, 31, 501-528.	1.2	33
108	Interaction of modulated pulses in the nonlinear Schrödinger equation with periodic potential. Journal of Differential Equations, 2008, 245, 939-963.	1.1	17

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109	On the Energy Release Rate in Finite-Strain Elasticity. <i>Mechanics of Advanced Materials and Structures</i> , 2008, 15, 421-427.	1.5	0
110	A class of minimum principles for characterizing the trajectories and the relaxation of dissipative systems. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2008, 14, 494-516.	0.7	62
111	A discrete variational principle for rate-independent evolution. <i>Advances in Calculus of Variations</i> , 2008, 1, .	0.7	24
112	A RATE-INDEPENDENT MODEL FOR THE ISOTHERMAL QUASI-STATIC EVOLUTION OF SHAPE-MEMORY MATERIALS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2008, 18, 125-164.	1.7	48
113	ON THE INVISCID LIMIT OF A MODEL FOR CRACK PROPAGATION. <i>Mathematical Models and Methods in Applied Sciences</i> , 2008, 18, 1529-1569.	1.7	94
114	Lagrangian and Hamiltonian two-scale reduction. <i>Journal of Mathematical Physics</i> , 2008, 49, .	0.5	6
115	Numerical Approximation Techniques for Rate-Independent Inelasticity. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2008, , 53-63.	0.1	1
116	Weak-convergence methods for Hamiltonian multiscale problems. <i>Discrete and Continuous Dynamical Systems</i> , 2008, 20, 53-79.	0.5	11
117	EXISTENCE AND UNIQUENESS RESULTS FOR A CLASS OF RATE-INDEPENDENT HYSTERESIS PROBLEMS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2007, 17, 81-123.	1.7	53
118	A model for temperature-induced phase transformations in finite-strain elasticity. <i>IMA Journal of Applied Mathematics</i> , 2007, 72, 644-658.	0.8	8
119	Two-Scale Homogenization for Evolutionary Variational Inequalities via the Energetic Formulation. <i>SIAM Journal on Mathematical Analysis</i> , 2007, 39, 642-668.	0.9	68
120	Analysis and Numerics for Rate-Independent Processes. <i>Oberwolfach Reports</i> , 2007, 4, 591-666.	0.0	0
121	Existence results for a contact problem with varying friction coefficient and nonlinear forces. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2007, 87, 616-631.	0.9	4
122	Infinite-Dimensional Hyperbolic Sets and Spatio-Temporal Chaos in Reaction Diffusion Systems in $\mathbb{R}^n$ . <i>Journal of Dynamics and Differential Equations</i> , 2007, 19, 333-389.	1.0	10
123	Existence results for a class of rate-independent material models with nonconvex elastic energies. <i>Journal Fur Die Reine Und Angewandte Mathematik</i> , 2006, 2006, .	0.4	86
124	Modeling and Analytical Study for Ferroelectric Materials. <i>Mechanics of Advanced Materials and Structures</i> , 2006, 13, 457-462.	1.5	5
125	Lower semicontinuity and existence of minimizers in incremental finite-strain elastoplasticity. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2006, 86, 233-250.	0.9	58
126	Macroscopic Behavior of Microscopic Oscillations in Harmonic Lattices via Wigner-Husimi Transforms. <i>Archive for Rational Mechanics and Analysis</i> , 2006, 181, 401-448.	1.1	58



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127	An energetic material model for time-dependent ferroelectric behaviour: existence and uniqueness. <i>Mathematical Methods in the Applied Sciences</i> , 2006, 29, 1393-1410.	1.2	26
128	Micro- $\leftrightarrow$ macro transition in the atomic chain via Whitham's modulation equation. <i>Nonlinearity</i> , 2006, 19, 471-500.	0.6	33
129	Continuum Descriptions for the Dynamics in Discrete Lattices: Derivation and Justification. , 2006, , 435-466.		10
130	A Rate-Independent Approach to the Delamination Problem. <i>Mathematics and Mechanics of Solids</i> , 2006, 11, 423-447.	1.5	56
131	A Mathematical Framework for Generalized Standard Materials in the Rate-Independent Case. , 2006, , 399-428.		30
132	RATE-INDEPENDENT DAMAGE PROCESSES IN NONLINEAR ELASTICITY. <i>Mathematical Models and Methods in Applied Sciences</i> , 2006, 16, 177-209.	1.7	98
133	Analytical and Numerical Methods for Finite-Strain Elastoplasticity. , 2006, , 491-529.		4
134	Dispersive evolution of pulses in oscillator chains with general interaction potentials. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2006, 6, 493-523.	0.5	24
135	Evolution of Rate-Independent Systems. <i>Handbook of Differential Equations: Evolutionary Equations</i> , 2005, 2, 461-559.	0.9	222
136	Dynamical Properties of Spatially Non-Decaying 2D Navier-Stokes Flows with Kolmogorov Forcing in an Infinite Strip. <i>Journal of Mathematical Fluid Mechanics</i> , 2005, 7, S51-S67.	0.4	15
137	Existence results for energetic models for rate-independent systems. <i>Calculus of Variations and Partial Differential Equations</i> , 2005, 22, 73-99.	0.9	146
138	Modelling of Microstructure and its Evolution in Shape-Memory-Alloy Single-Crystals, in Particular in CuAlNi. <i>Meccanica</i> , 2005, 40, 389-418.	1.2	86
139	Vortex pinning in super-conductivity as a rate-independent process. <i>European Journal of Applied Mathematics</i> , 2005, 16, 799-808.	1.4	7
140	The nonlinear Schrödinger equation as a macroscopic limit for an oscillator chain with cubic nonlinearities. <i>Nonlinearity</i> , 2004, 17, 551-565.	0.6	49
141	On rate-independent hysteresis models. <i>Nonlinear Differential Equations and Applications</i> , 2004, 11, 151.	0.4	183
142	Macroscopic pulse evolution for a nonlinear oscillator chain. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2004, 4, 540-541.	0.2	1
143	Deriving new evolution equations for microstructures via relaxation of variational incremental problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004, 193, 5095-5127.	3.4	46
144	Existence of Minimizers in Incremental Elasto-Plasticity with Finite Strains. <i>SIAM Journal on Mathematical Analysis</i> , 2004, 36, 384-404.	0.9	55

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145	Energetic formulation of multiplicative elasto-plasticity using dissipation distances. Continuum Mechanics and Thermodynamics, 2003, 15, 351-382.	1.4	137
146	Convergence Results for a Coarsening Model Using Global Linearization. Journal of Nonlinear Science, 2003, 13, 311-346.	1.0	15
147	Errata to "The free energy of mixing for n-variant martensitic phase transformations using quasi-convex analysis". Journal of the Mechanics and Physics of Solids, 2003, 51, 763.	2.3	28
148	A Rate-Independent Model for Inelastic Behavior of Shape-Memory Alloys. Multiscale Modeling and Simulation, 2003, 1, 571-597.	0.6	88
149	Dissipation distances in multiplicative elastoplasticity. Lecture Notes in Applied and Computational Mechanics, 2003, , 87-100.	2.0	16
150	Finite Elastoplasticity Lie Groups and Geodesics on $SL(d)$ . , 2002, , 61-90.		52
151	The Ginzburg-Landau Equation in Its Role as a Modulation Equation* *The research was partially supported by DFG-SPP "Dynamische Systeme" under Mi 459/2 and by Volkswagen-Stiftung under 1/71016.. Handbook of Dynamical Systems, 2002, 2, 759-834.	0.6	69
152	On the energetic stability of solitary water waves. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2002, 360, 2337-2358.	1.6	30
153	Infinite-dimensional trajectory attractors of elliptic boundary-value problems in cylindrical domains. Russian Mathematical Surveys, 2002, 57, 753-784.	0.2	20
154	Non-convex potentials and microstructures in finite-strain plasticity. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 299-317.	1.0	296
155	A new identity for the surface impedance matrix and its application to the determination of surface-wave speeds. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 2523-2543.	1.0	57
156	A Variational Formulation of "Rate-Independent Phase Transformations" Using an Extremum Principle. Archive for Rational Mechanics and Analysis, 2002, 162, 137-177.	1.1	242
157	Multi-pulse solutions to the Navier-Stokes problem between parallel plates. Zeitschrift Fur Angewandte Mathematik Und Physik, 2001, 52, 79-100.	0.7	14
158	Nonlocal modulation equations for viscous-fluid flows in layers and spatially localized perturbations. Doklady Physics, 2001, 46, 869-872.	0.2	1
159	A spatial dynamics approach to three-dimensional gravity-capillary steady water waves. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2001, 131, 83-136.	0.8	57
160	Stability and Diffusive Dynamics on Extended Domains. , 2001, , 563-583.		9
161	Influence of Hardening and Inhomogeneity on Internal Loops in Pseudoelasticity. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2000, 80, 291-306.	0.9	11
162	Comparison of Inertial Manifolds and Application to Modulated Systems. Mathematische Nachrichten, 2000, 214, 53-69.	0.4	22

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163	Bifurcation of Homoclinic Orbits to a Saddle-Focus in Reversible Systems with $SO(2)$ -Symmetry. Journal of Differential Equations, 1999, 159, 370-402.	1.1	20
164	Flow properties for Young-measure solutions of semilinear hyperbolic problems. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1999, 129, 85-123.	0.8	15
165	Quasiconvexity at the Boundary and a Simple Variational Formulation of Agmon's Condition. , 1998, 51, 23-41.		39
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