

# Ulisse Stefanelli

## List of Publications by Year in descending order

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127  
papers

1,807  
citations

279798

23  
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345221

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130  
all docs

130  
docs citations

130  
times ranked

571  
citing authors

#	ARTICLE	IF	CITATIONS
1	A three-dimensional model describing stress-induced solid phase transformation with permanent inelasticity. <i>International Journal of Plasticity</i> , 2007, 23, 207-226.	8.8	216
2	$\hat{\Gamma}$ -limits and relaxations for rate-independent evolutionary problems. <i>Calculus of Variations and Partial Differential Equations</i> , 2008, 31, 387-416.	1.7	149
3	A macroscopic 1D model for shape memory alloys including asymmetric behaviors and transformation-dependent elastic properties. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2009, 198, 1631-1637.	6.6	87
4	The Brezis-Ékeland Principle for Doubly Nonlinear Equations. <i>SIAM Journal on Control and Optimization</i> , 2008, 47, 1615-1642.	2.1	55
5	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.	3.3	48
6	Crystallization in Carbon Nanostructures. <i>Communications in Mathematical Physics</i> , 2014, 328, 545-571.	2.2	39
7	Finite crystallization in the square lattice. <i>Nonlinearity</i> , 2014, 27, 717-737.	1.4	34
8	Well-posedness and long-time behavior for a class of doubly nonlinear equations. <i>Discrete and Continuous Dynamical Systems</i> , 2007, 18, 15-38.	0.9	33
9	Diffusion in poro-plastic media. <i>Mathematical Methods in the Applied Sciences</i> , 2004, 27, 2131-2151.	2.3	30
10	A variational characterization of rate-independent evolution. <i>Mathematische Nachrichten</i> , 2009, 282, 1492-1512.	0.8	28
11	Weighted energy-dissipation functionals for gradient flows. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2011, 17, 52-85.	1.3	28
12	THE DE GIORGI CONJECTURE ON ELLIPTIC REGULARIZATION. <i>Mathematical Models and Methods in Applied Sciences</i> , 2011, 21, 1377-1394.	3.3	28
13	Global existence for a class of generalized systems for irreversible phase changes. <i>Nonlinear Differential Equations and Applications</i> , 2002, 9, 255-276.	0.8	27
14	Global existence of a strong solution to the one-dimensional full model for irreversible phase transitions. <i>Journal of Mathematical Analysis and Applications</i> , 2002, 271, 426-442.	1.0	27
15	Linearized plasticity is the evolutionary $\Gamma$ -limit of finite plasticity. <i>Journal of the European Mathematical Society</i> , 2013, 15, 923-948.	1.4	27
16	Global solution to a phase field model with irreversible and constrained phase evolution. <i>Quarterly of Applied Mathematics</i> , 2002, 60, 301-316.	0.7	26
17	Phase-Field Models with Hysteresis in One-Dimensional Thermoviscoplasticity. <i>SIAM Journal on Mathematical Analysis</i> , 2002, 34, 409-434.	1.9	25
18	Error Estimates for Space-Time Discretizations of a Rate-Independent Variational Inequality. <i>SIAM Journal on Numerical Analysis</i> , 2010, 48, 1625-1646.	2.3	25

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19	Doubly Nonlinear Equations as Convex Minimization. SIAM Journal on Mathematical Analysis, 2014, 46, 1922-1945.	1.9	25
20	Attractors for Gradient Flows of Nonconvex Functionals and Applications. Archive for Rational Mechanics and Analysis, 2007, 187, 91-135.	2.4	24
21	A discrete variational principle for rate-independent evolution. Advances in Calculus of Variations, 2008, 1, .	1.2	24
22	Weighted energy-dissipation functionals for doubly nonlinear evolution. Journal of Functional Analysis, 2011, 260, 2541-2578.	1.4	24
23	EXISTENCE RESULT FOR A NONLINEAR MODEL RELATED TO IRREVERSIBLE PHASE CHANGES. Mathematical Models and Methods in Applied Sciences, 2001, 11, 809-825.	3.3	23
24	Existence Result for the One-Dimensional Full Model of Phase Transitions. Zeitschrift Fur Analysis Und Ihre Anwendung, 2002, 21, 335-350.	0.6	22
25	A Variational Principle for Hardening Elastoplasticity. SIAM Journal on Mathematical Analysis, 2008, 40, 623-652.	1.9	21
26	A variational principle for doubly nonlinear evolution. Applied Mathematics Letters, 2010, 23, 1120-1124.	2.7	20
27	A three-dimensional phenomenological model for Magnetic Shape Memory Alloys. GAMM Mitteilungen, 2011, 34, 90-96.	5.5	20
28	MAGNETIC SHAPE MEMORY ALLOYS: THREE-DIMENSIONAL MODELING AND ANALYSIS. Mathematical Models and Methods in Applied Sciences, 2011, 21, 1043-1069.	3.3	20
29	A New Minimum Principle for Lagrangian Mechanics. Journal of Nonlinear Science, 2013, 23, 179-204.	2.1	19
30	Wulff shape emergence in graphene. Mathematical Models and Methods in Applied Sciences, 2016, 26, 2277-2310.	3.3	19
31	Sharp $N^{3/4}$ Law for the Minimizers of the Edge-Isoperimetric Problem on the Triangular Lattice. Journal of Nonlinear Science, 2017, 27, 627-660.	2.1	19
32	On some nonlocal evolution equations in Banach spaces. Journal of Evolution Equations, 2004, 4, 1-26.	1.1	18
33	Magnetic shape-memory alloys: thermomechanical modelling and analysis. Continuum Mechanics and Thermodynamics, 2014, 26, 783-810.	2.2	16
34	Existence results for incompressible magnetoelasticity. Discrete and Continuous Dynamical Systems, 2015, 35, 2615-2623.	0.9	16
35	Time-discretization and global solution for a doubly nonlinear Volterra equation. Journal of Differential Equations, 2006, 228, 707-736.	2.2	15
36	Nonlocal quasivariational evolution problems. Journal of Differential Equations, 2006, 229, 204-228.	2.2	15

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37	Young-Measure Quasi-Static Damage Evolution. Archive for Rational Mechanics and Analysis, 2012, 203, 415-453.	2.4	15
38	A variational view at the time-dependent minimal surface equation. Journal of Evolution Equations, 2011, 11, 793-809.	1.1	14
39	Numerical analysis of a three-dimensional super-elastic constitutive model. International Journal for Numerical Methods in Engineering, 2004, 61, 142-155.	2.8	13
40	A Counterexample to $C^{2,1}$ Regularity for Parabolic Fully Nonlinear Equations. Communications in Partial Differential Equations, 2008, 33, 1216-1234.	2.2	13
41	A phenomenological model for the magneto-mechanical response of single-crystal magnetic shape memory alloys. European Journal of Mechanics, A/Solids, 2015, 52, 1-11.	3.7	13
42	Finite Plasticity in $\mathbb{P}^{\text{op}}$ . Part II: Quasi-Static Evolution and Linearization. SIAM Journal on Mathematical Analysis, 2017, 49, 1356-1384.	1.9	13
43	A Phase-Field Approach to Eulerian Interfacial Energies. Archive for Rational Mechanics and Analysis, 2019, 234, 351-373.	2.4	13
44	Well-Posedness and Time Discretization of a Nonlinear Volterra Integrodifferential Equation. Journal of Integral Equations and Applications, 2001, 13, .	0.6	13
45	Finite plasticity in $\mathbb{P}^{\text{op}}$ . Part I: constitutive model. Continuum Mechanics and Thermodynamics, 2017, 29, 97-116.	2.2	12
46	Periodic solutions for doubly nonlinear evolution equations. Journal of Differential Equations, 2011, 251, 1790-1812.	2.2	11
47	Magnetic control of magnetic shape-memory single crystals. Physica B: Condensed Matter, 2012, 407, 1316-1321.	2.7	11
48	Existence of varifold minimizers for the multiphase Canham-Helfrich functional. Calculus of Variations and Partial Differential Equations, 2020, 59, 1.	1.7	11
49	Well-posedness of a thermo-mechanical model for shape memory alloys under tension. ESAIM: Mathematical Modelling and Numerical Analysis, 2010, 44, 1239-1253.	1.9	11
50	A rate-independent model for permanent inelastic effects in shape memory materials. Networks and Heterogeneous Media, 2011, 6, 145-165.	1.1	11
51	Global attractors for gradient flows in metric spaces. Journal Des Mathematiques Pures Et Appliquees, 2011, 95, 205-244.	1.6	10
52	Existence and time-discretization for the finite-strain Souza-Auricchio constitutive model for shape-memory alloys. Continuum Mechanics and Thermodynamics, 2012, 24, 63-77.	2.2	10
53	A phenomenological model for microstructure-dependent inelasticity in shape-memory alloys. Meccanica, 2014, 49, 2265-2283.	2.0	10
54	Topology Optimization for Incremental Elastoplasticity: A Phase-Field Approach. SIAM Journal on Control and Optimization, 2021, 59, 339-364.	2.1	10

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55	Quasistatic evolution for dislocation-free finite plasticity. ESAIM - Control, Optimisation and Calculus of Variations, 2020, 26, 123.	1.3	10
56	WELL-POSEDNESS AND APPROXIMATION FOR A ONE-DIMENSIONAL MODEL FOR SHAPE MEMORY ALLOYS. Mathematical Models and Methods in Applied Sciences, 2005, 15, 1301-1327.	3.3	9
57	A variational principle for gradient flows in metric spaces. Comptes Rendus Mathematique, 2011, 349, 1225-1228.	0.3	9
58	Stability Results for Doubly Nonlinear Differential Inclusions by Variational Convergence. SIAM Journal on Control and Optimization, 2014, 52, 1071-1107.	2.1	9
59	$\mathbb{N}^{\{3/4\}}$ Law in the Cubic Lattice. Journal of Statistical Physics, 2019, 176, 1480-1499.	1.2	9
60	Crystalline and Isoperimetric Square Configurations. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 1045-1048.	0.2	8
61	Carbon-Nanotube Geometries as Optimal Configurations. Multiscale Modeling and Simulation, 2017, 15, 1448-1471.	1.6	8
62	Quasistatic elastoplasticity via Peridynamics: existence and localization. Continuum Mechanics and Thermodynamics, 2018, 30, 1155-1184.	2.2	8
63	Long-time behavior for the full one-dimensional Frémond model for shape memory alloys. Continuum Mechanics and Thermodynamics, 2000, 12, 423-433.	2.2	7
64	Positivity of the temperature for phase transitions with micro-movements. Nonlinear Analysis: Real World Applications, 2007, 8, 257-266.	1.7	7
65	A macroscopic model for magnetic shape-memory single crystals. Zeitschrift Fur Angewandte Mathematik Und Physik, 2013, 64, 343-359.	1.4	7
66	Gradient structures for the thermomechanics of shape-memory materials. Computer Methods in Applied Mechanics and Engineering, 2016, 299, 440-469.	6.6	7
67	The Geometry of $\mathcal{C}_0$ : A Rigorous Approach via Molecular Mechanics. SIAM Journal on Applied Mathematics, 2016, 76, 2009-2029.	1.8	7
68	Weighted Energy-Dissipation principle for gradient flows in metric spaces. Journal Des Mathematiques Pures Et Appliquees, 2019, 127, 1-66.	1.6	7
69	Existence for dislocation-free finite plasticity. ESAIM - Control, Optimisation and Calculus of Variations, 2019, 25, 21.	1.3	7
70	Dynamic Perfect Plasticity as Convex Minimization. SIAM Journal on Mathematical Analysis, 2019, 51, 672-730.	1.9	7
71	Doubly nonlinear stochastic evolution equations. Mathematical Models and Methods in Applied Sciences, 2020, 30, 991-1031.	3.3	7
72	Magnetoelastic thin films at large strains. Continuum Mechanics and Thermodynamics, 2021, 33, 327-341.	2.2	7

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73	Mixed variational formulations for structural topology optimization based on the phase-field approach. <i>Structural and Multidisciplinary Optimization</i> , 2021, 64, 2627-2652.	3.5	7
74	The Souza-Auricchio model for shape-memory alloys. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2015, 8, 723-747.	1.1	7
75	Analysis of a variable time-step discretization of the three-dimensional Frémond model for shape memory alloys. <i>Mathematics of Computation</i> , 2002, 71, 1431-1454.	2.1	6
76	Weighted Energy-Dissipation approach to doubly nonlinear problems on the half line. <i>Journal of Evolution Equations</i> , 2018, 18, 49-74.	1.1	6
77	Thermodynamics of Elastoplastic Porous Rocks at Large Strains Towards Earthquake Modeling. <i>SIAM Journal on Applied Mathematics</i> , 2018, 78, 2597-2625.	1.8	6
78	Thermal control of the Souza-Auricchio model for shape memory alloys. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2013, 6, 369-386.	1.1	6
79	Analysis of a Thermomechanical Model for Shape Memory Alloys. <i>SIAM Journal on Mathematical Analysis</i> , 2005, 37, 130-155.	1.9	5
80	Existence for a doubly nonlinear Volterra equation. <i>Journal of Mathematical Analysis and Applications</i> , 2007, 333, 839-862.	1.0	5
81	Graphene ground states. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2018, 69, 1.	1.4	5
82	A note about hardening-free viscoelastic models in Maxwellian-type rheologies at large strains. <i>Mathematics and Mechanics of Solids</i> , 2021, 26, 1483-1497.	2.4	5
83	Lattice ground states for embedded-atom models in 2D and 3D. <i>Letters in Mathematical Physics</i> , 2021, 111, 1.	1.1	5
84	Error Bounds for Space-Time Discretizations of a 3D Model for Shape-Memory Materials. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2010, , 185-197.	0.2	5
85	Error Control Of A Nonlinear Evolution Problem Related To Phase Transitions. <i>Numerical Functional Analysis and Optimization</i> , 1999, 20, 585-608.	1.4	4
86	QUASISTATIC ISOTHERMAL EVOLUTION OF SHAPE MEMORY ALLOYS. <i>Mathematical Models and Methods in Applied Sciences</i> , 2011, 21, 2409-2432.	3.3	4
87	Quasistatic evolution of magnetoelastic plates via dimension reduction. <i>Discrete and Continuous Dynamical Systems</i> , 2015, 35, 5999-6013.	0.9	4
88	Stable carbon configurations. <i>Bolletino Dell Unione Matematica Italiana</i> , 2017, 10, 335-354.	1.0	4
89	A variational approach to Navier–Stokes. <i>Nonlinearity</i> , 2018, 31, 5664-5682.	1.4	4
90	Finite thermoelastoplasticity and creep under small elastic strains. <i>Mathematics and Mechanics of Solids</i> , 2019, 24, 1161-1181.	2.4	4

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91	Dynamic perfect plasticity and damage in viscoelastic solids. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2019, 99, e201800161.	1.6	4
92	Equilibrium for Multiphase Solids with Eulerian Interfaces. Journal of Elasticity, 2020, 142, 409-431.	1.9	4
93	Crystallization in a One-Dimensional Periodic Landscape. Journal of Statistical Physics, 2020, 179, 485-501.	1.2	4
94	Stochastic PDEs via convex minimization. Communications in Partial Differential Equations, 2021, 46, 66-97.	2.2	4
95	Optimal control of a rate-independent evolution equation via viscous regularization. Discrete and Continuous Dynamical Systems - Series S, 2017, 10, 1467-1485.	1.1	4
96	Analysis of a variable time-step discretization for the Penrose's phase relaxation problem. Nonlinear Analysis: Theory, Methods & Applications, 2001, 45, 213-240.	1.1	3
97	A generalized phase relaxation model with hysteresis. Nonlinear Analysis: Theory, Methods & Applications, 2003, 55, 381-398.	1.1	3
98	Two Structure-Preserving Time Discretizations for Gradient Flows. Applied Mathematics and Optimization, 2019, 80, 733-764.	1.6	3
99	Doubly nonlinear stochastic evolution equations II. Stochastics and Partial Differential Equations: Analysis and Computations, 2023, 11, 307-347.	0.9	3
100	Topology optimization for quasistatic elastoplasticity. ESAIM - Control, Optimisation and Calculus of Variations, 2022, 28, 47.	1.3	3
101	Study of a system for the isothermal separation of components in a binary alloy with change of phase. IMA Journal of Applied Mathematics, 2004, 69, 233-257.	1.6	2
102	Structure result for steady-state solutions of a one-dimensional Frémond model of SMA. Physica D: Nonlinear Phenomena, 2004, 190, 190-212.	2.8	2
103	Chain-like ground states in three dimensions. Transactions of Mathematics and Its Applications, 2018, 2, .	3.3	2
104	Characterization of Optimal Carbon Nanotubes Under Stretching and Validation of the Cauchy's Born Rule. Archive for Rational Mechanics and Analysis, 2019, 231, 465-517.	2.4	2
105	Pinning of interfaces by localized dry friction. Journal of Differential Equations, 2020, 269, 7356-7381.	2.2	2
106	Carbon-nanotube geometries: Analytical and numerical results. Discrete and Continuous Dynamical Systems - Series S, 2017, 10, 141-160.	1.1	2
107	A Quasi-Stationary Phase-Field Model with Micro-Movements. Applied Mathematics and Optimization, 2004, 50, 67.	1.6	1
108	Shape flows for spectral optimization problems. Interfaces and Free Boundaries, 2013, 14, 521-544.	0.8	1

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109	An order approach to SPDEs with antimonotone terms. <i>Stochastics and Partial Differential Equations: Analysis and Computations</i> , 2020, 8, 819-832.	0.9	1
110	Ripples in Graphene: A Variational Approach. <i>Communications in Mathematical Physics</i> , 2020, 379, 915-954.	2.2	1
111	Linearization for finite plasticity under dislocation-density tensor regularization. <i>Continuum Mechanics and Thermodynamics</i> , 2021, 33, 179-208.	2.2	1
112	A minimizing-movements approach to GENERIC systems. <i>Mathematics in Engineering</i> , 2022, 4, 1-18.	0.9	1
113	Analysis of a variable time-step discretization for a phase transition model with micro-movements. <i>Communications on Pure and Applied Analysis</i> , 2006, 5, 659-673.	0.8	1
114	Existence results for a morphoelastic model. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 0, , .	1.6	1
115	Boundedness of the temperature for the general Frémond model for shape memory alloys. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2002, 53, 704-711.	1.4	0
116	ANALYSIS OF A 1-D THERMOVISCOELASTIC MODEL WITH TEMPERATURE-DEPENDENT VISCOSITY. <i>Series on Advances in Mathematics for Applied Sciences</i> , 2006, , 225-246.	0.1	0
117	A finite-strain model for incomplete damage in elastoplastic materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 374, 113571.	6.6	0
118	Rate-independent evolution of sets. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2021, 14, 89-119.	1.1	0
119	Equilibrium of immersed hyperelastic solids. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2021, 14, 4141.	1.1	0
120	Preface: Rate-independent evolutions. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2013, 6, i-ii.	1.1	0
121	Existence and linearization for the Souza-Auricchio model at finite strains. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2017, 10, 1257-1280.	1.1	0
122	Preface: Applications of mathematics to mechanics. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2017, 10, i-ii.	1.1	0
123	Nondecreasing Solutions to Doubly Nonlinear Equations. <i>Springer INdAM Series</i> , 2017, , 31-53.	0.5	0
124	Well-posedness of a one-dimensional nonlinear kinematic hardening model. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2020, 13, 2271-2284.	1.1	0
125	Stability of $Z_2$ configurations in 3D. <i>Nonlinearity</i> , 2021, 34, 8392-8413.	1.4	0
126	Equilibria of Charged Hyperelastic Solids. <i>SIAM Journal on Mathematical Analysis</i> , 2022, 54, 1470-1487.	1.9	0



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127	Tilings with Nonflat Squares: A Characterization. Milan Journal of Mathematics, 0, , 1.	1.1	0