

# Stefan MÃ¼ller

## List of Publications by Year in descending order

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65  
papers

4,640  
citations

201385

27  
h-index

114278

63  
g-index

65  
all docs

65  
docs citations

65  
times ranked

1776  
citing authors

#	ARTICLE	IF	CITATIONS
1	A theorem on geometric rigidity and the derivation of nonlinear plate theory from three-dimensional elasticity. <i>Communications on Pure and Applied Mathematics</i> , 2002, 55, 1461-1506.	1.2	493
2	A Hierarchy of Plate Models Derived from Nonlinear Elasticity by Gamma-Convergence. <i>Archive for Rational Mechanics and Analysis</i> , 2006, 180, 183-236.	1.1	316
3	Variational models for microstructure and phase transitions. <i>Lecture Notes in Mathematics</i> , 1999, , 85-210.	0.1	303
4	Homogenization of nonlinearly elastic materials, microscopic bifurcation and macroscopic loss of rank-one convexity. <i>Archive for Rational Mechanics and Analysis</i> , 1993, 122, 231-290.	1.1	302
5	Caloric Effects in Ferroic Materials: New Concepts for Cooling. <i>Advanced Engineering Materials</i> , 2012, 14, 10-19.	1.6	278
6	Energy barriers and hysteresis in martensitic phase transformations. <i>Acta Materialia</i> , 2009, 57, 4332-4352.	3.8	243
7	Homogenization of nonconvex integral functionals and cellular elastic materials. <i>Archive for Rational Mechanics and Analysis</i> , 1987, 99, 189-212.	1.1	238
8	Surface energy and microstructure in coherent phase transitions. <i>Communications on Pure and Applied Mathematics</i> , 1994, 47, 405-435.	1.2	204
9	Branching of twins near an austenite-twinning-martensite interface. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1992, 66, 697-715.	0.8	194
10	Local $W^{1,p}$ -Quasiconvexity, Lower Semicontinuity, and Young Measures. <i>SIAM Journal on Mathematical Analysis</i> , 1999, 30, 1355-1390.	0.9	183
11	Convex integration for Lipschitz mappings and counterexamples to regularity. <i>Annals of Mathematics</i> , 2003, 157, 715-742.	2.1	160
12	An existence theory for nonlinear elasticity that allows for cavitation. <i>Archive for Rational Mechanics and Analysis</i> , 1995, 131, 1-66.	1.1	143
13	Quasi-Convex Integrands and Lower Semicontinuity in $L^1$ . <i>SIAM Journal on Mathematical Analysis</i> , 1992, 23, 1081-1098.	0.9	141
14	Relaxation of quasiconvex functional in $BV(\Omega; \mathbb{R}^n)$ for integrands $f(x, u, \nabla u)$ . <i>Archive for Rational Mechanics and Analysis</i> , 1993, 123, 1-49.	1.1	128
15	Analysis of Concentration and Oscillation Effects Generated by Gradients. <i>SIAM Journal on Mathematical Analysis</i> , 1998, 29, 736-756.	0.9	113
16	A reduced theory for thin-film micromagnetics. <i>Communications on Pure and Applied Mathematics</i> , 2002, 55, 1408-1460.	1.2	109
17	A Variational Model for Dislocations in the Line Tension Limit. <i>Archive for Rational Mechanics and Analysis</i> , 2006, 181, 535-578.	1.1	86
18	Derivation of the nonlinear bending-torsion theory for inextensible rods by $\Gamma$ -convergence. <i>Calculus of Variations and Partial Differential Equations</i> , 2003, 18, 287-305.	0.9	85

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19	A new approach to variational problems with multiple scales. Communications on Pure and Applied Mathematics, 2001, 54, 761-825.	1.2	76
20	Non-linear elliptic systems with measure-valued right hand side. Mathematische Zeitschrift, 1997, 226, 545-574.	0.4	65
21	Energy Scaling of Compressed Elastic Films -Three-Dimensional Elasticity and Reduced Theories. Archive for Rational Mechanics and Analysis, 2002, 164, 1-37.	1.1	57
22	Studying Nonlinear pde by Geometry in Matrix Space. , 2003, , 347-395.		50
23	Two-dimensional modelling of soft ferromagnetic films. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2001, 457, 2983-2991.	1.0	45
24	Invertibility and a Topological Property of Sobolev Maps. SIAM Journal on Mathematical Analysis, 1996, 27, 959-976.	0.9	37
25	On the singular support of the distributional determinant. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 1993, 10, 657-696.	0.7	31
26	Singular Kernels, Multiscale Decomposition of Microstructure, and Dislocation Models. Archive for Rational Mechanics and Analysis, 2011, 199, 779-819.	1.1	31
27	The uniform Korn-Poincaré inequality in thin domains. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2011, 28, 443-469.	0.7	31
28	Stability of Slender Bodies under Compression and Validity of the von Kármán Theory. Archive for Rational Mechanics and Analysis, 2009, 193, 255-310.	1.1	27
29	Strict Convexity of the Free Energy for a Class of Non-Convex Gradient Models. Communications in Mathematical Physics, 2009, 286, 359-376.	1.0	27
30	The time-dependent von Kármán plate equation as a limit of 3d nonlinear elasticity. Calculus of Variations and Partial Differential Equations, 2011, 41, 241-259.	0.9	26
31	Regularity properties of isometric immersions. Mathematische Zeitschrift, 2005, 251, 313-331.	0.4	25
32	Korn's second inequality and geometric rigidity with mixed growth conditions. Calculus of Variations and Partial Differential Equations, 2014, 50, 437-454.	0.9	24
33	Rigidity estimate for two incompatible wells. Calculus of Variations and Partial Differential Equations, 2004, 19, 379-390.	0.9	23
34	Self-similar folding patterns and energy scaling in compressed elastic sheets. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 2534-2549.	3.4	22
35	On the Commutability of Homogenization and Linearization in Finite Elasticity. Archive for Rational Mechanics and Analysis, 2011, 201, 465-500.	1.1	21
36	Conical singularities in thin elastic sheets. Calculus of Variations and Partial Differential Equations, 2014, 49, 1177-1186.	0.9	20

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37	Korn inequalities for incompatible tensor fields in three space dimensions with conformally invariant dislocation energy. <i>Calculus of Variations and Partial Differential Equations</i> , 2021, 60, 1.	0.9	20
38	A-quasiconvexity: weak-star convergence and the gap. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2004, 21, 209-236.	0.7	19
39	Relaxation and regularization of nonconvex variational problems. <i>Milan Journal of Mathematics</i> , 1992, 62, 89-113.	0.1	18
40	A new approach to variational problems with multiple scales. <i>Communications on Pure and Applied Mathematics</i> , 2001, 54, 826-850.	1.2	18
41	Rigorous Derivation of $\Gamma$ -Theory for Clamped Elastic Membranes Leads to Relaxation. <i>SIAM Journal on Mathematical Analysis</i> , 2006, 38, 657-680.	0.9	17
42	Existence of minimizers for a polyconvex energy in a crystal with dislocations. <i>Calculus of Variations and Partial Differential Equations</i> , 2008, 31, 473-482.	0.9	17
43	A note on the optimal constants in Korn's and geometric rigidity estimates in bounded and unbounded domains. <i>Indiana University Mathematics Journal</i> , 2016, 65, 377-397.	0.4	16
44	Parabolic Systems with Nowhere Smooth Solutions. <i>Archive for Rational Mechanics and Analysis</i> , 2005, 177, 1-20.	1.1	15
45	Large Time Existence for Thin Vibrating Plates. <i>Communications in Partial Differential Equations</i> , 2011, 36, 2062-2102.	1.0	13
46	Striped Periodic Minimizers of a Two-Dimensional Model for Martensitic Phase Transitions. <i>Communications in Mathematical Physics</i> , 2012, 309, 313-339.	1.0	13
47	Energy Bounds for a Compressed Elastic Film on a Substrate. <i>Journal of Nonlinear Science</i> , 2017, 27, 453-494.	1.0	13
48	The two-well problem in three dimensions. <i>Calculus of Variations and Partial Differential Equations</i> , 2000, 10, 21-40.	0.9	11
49	A nonlinear model for inextensible rods as a low energy $\Gamma$ -limit of three-dimensional nonlinear elasticity. <i>Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire</i> , 2004, 21, 271-293.	0.7	11
50	Derivation of a rod theory for biphase materials with dislocations at the interface. <i>Calculus of Variations and Partial Differential Equations</i> , 2013, 48, 315-335.	0.9	11
51	An isoperimetric estimate and $W^{1,p}$ -quasiconvexity in nonlinear elasticity. <i>Calculus of Variations and Partial Differential Equations</i> , 1999, 8, 159-176.	0.9	9
52	Estimates for the Green's Function of the Discrete Bilaplacian in Dimensions 2 and 3. <i>Vietnam Journal of Mathematics</i> , 2019, 47, 133-181.	0.4	9
53	Quasiconvexity is not invariant under transposition. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 2000, 130, 389-395.	0.8	8
54	Compensated Compactness, Separately Convex Functions and Interpolatory Estimates between Riesz Transforms and Haar Projections. <i>Communications in Partial Differential Equations</i> , 2011, 36, 547-601.	1.0	8

#	ARTICLE	IF	CITATIONS
55	Almost Conical Deformations of Thin Sheets with Rotational Symmetry. SIAM Journal on Mathematical Analysis, 2014, 46, 25-44.	0.9	7
56	On a Differential Inclusion Related to the Born-Infeld Equations. SIAM Journal on Mathematical Analysis, 2014, 46, 2385-2403.	0.9	7
57	Microstructures, Phase Transitions and Geometry. Progress in Mathematics, 1998, , 92-115.	0.2	7
58	Local strong solutions to a quasilinear degenerate fourth-order thin-film equation. Nonlinear Differential Equations and Applications, 2020, 27, 1.	0.4	5
59	Mathematical Problems in Thin Elastic Sheets: Scaling Limits, Packing, Crumpling and Singularities. Lecture Notes in Mathematics, 2017, , 125-193.	0.1	5
60	Monotone curves. Mathematische Annalen, 2011, 351, 81-94.	0.7	2
61	Critique of the paper 'The relaxation non-quasiconvex variational integrals'. Numerische Mathematik, 2003, 93, 523-525.	0.9	1
62	$\gamma$ -quasiconvexit� : convergence faible- $\ast$ et le trou. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2004, 21, 209-236.	0.7	1
63	Vector-Valued Partial Differential Equations and Applications. Lecture Notes in Mathematics, 2017, , .	0.1	1
64	Folding Patterns in Partially Delaminated Thin Films. Lecture Notes in Applied and Computational Mechanics, 2016, , 25-39.	2.0	1
65	A Constrained Model for MSMA. Advanced Engineering Materials, 2012, 14, 594-600.	1.6	0