

# Lars Diening

## List of Publications by Year in descending order

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57  
papers

3,311  
citations

257101

24  
h-index

149479

56  
g-index

62  
all docs

62  
docs citations

62  
times ranked

846  
citing authors

#	ARTICLE	IF	CITATIONS
1	Lebesgue and Sobolev Spaces with Variable Exponents. Lecture Notes in Mathematics, 2011, , .	0.1	1,232
2	Riesz potential and Sobolev embeddings on generalized Lebesgue and Sobolev spaces $L_{p(\cdot)}$ and $W_{k,p(\cdot)}$ . Mathematische Nachrichten, 2004, 268, 31-43.	0.4	243
3	Maximal function on Musielak-Orlicz spaces and generalized Lebesgue spaces. Bulletin Des Sciences Mathematiques, 2005, 129, 657-700.	0.5	228
4	Fractional estimates for non-differentiable elliptic systems with general growth. Forum Mathematicum, 2008, 20, .	0.3	153
5	Linear Convergence of an Adaptive Finite Element Method for the $p$ -Laplacian Equation. SIAM Journal on Numerical Analysis, 2008, 46, 614-638.	1.1	110
6	A decomposition technique for John domains. Annales Academiae Scientiarum Fennicae Mathematica, 2010, 35, 87-114.	0.7	109
7	Everywhere regularity of functionals with $\dot{W}^{1,p}$ -growth. Manuscripta Mathematica, 2009, 129, 449-481.	0.3	99
8	The maximal operator on weighted variable Lebesgue spaces. Fractional Calculus and Applied Analysis, 2011, 14, 361-374.	1.2	87
9	On Lipschitz truncations of Sobolev functions (with variable exponent) and their selected applications. ESAIM - Control, Optimisation and Calculus of Variations, 2008, 14, 211-232.	0.7	85
10	Existence of Strong Solutions for Incompressible Fluids with Shear Dependent Viscosities. Journal of Mathematical Fluid Mechanics, 2010, 12, 101-132.	0.4	76
11	Strong Solutions for Generalized Newtonian Fluids. Journal of Mathematical Fluid Mechanics, 2005, 7, 413-450.	0.4	70
12	Optimality of an adaptive finite element method for the $p$ -Laplacian equation. IMA Journal of Numerical Analysis, 2012, 32, 484-510.	1.5	62
13	SOLENOIDAL LIPSCHITZ TRUNCATION FOR PARABOLIC PDEs. Mathematical Models and Methods in Applied Sciences, 2013, 23, 2671-2700.	1.7	57
14	Optimal Convergence for the Implicit Space-Time Discretization of Parabolic Systems with $p$ -Structure. SIAM Journal on Numerical Analysis, 2007, 45, 457-472.	1.1	49
15	Finite Element Approximation of Steady Flows of Incompressible Fluids with Implicit Power-Law-Like Rheology. SIAM Journal on Numerical Analysis, 2013, 51, 984-1015.	1.1	46
16	Existence, uniqueness and optimal regularity results for very weak solutions to nonlinear elliptic systems. Analysis and PDE, 2016, 9, 1115-1151.	0.6	42
17	Partial Regularity for Minimizers of Quasi-convex Functionals with General Growth. SIAM Journal on Mathematical Analysis, 2012, 44, 3594-3616.	0.9	38
18	The $\dot{W}^{1,p}$ -harmonic approximation and the regularity of $\dot{W}^{1,p}$ -harmonic maps. Journal of Differential Equations, 2012, 253, 1943-1958.	1.1	36

#	ARTICLE	IF	CITATIONS
19	Sharp Conditions for Korn Inequalities in Orlicz Spaces. Journal of Mathematical Fluid Mechanics, 2012, 14, 565-573.	0.4	32
20	Higher order Calderón-Zygmund estimates for the p-Laplace equation. Journal of Differential Equations, 2020, 268, 590-635.	1.1	30
21	A Relaxed Kármán iteration for the p-poisson problem. Numerische Mathematik, 2020, 145, 1-34.	0.9	30
22	Pointwise Calderón-Zygmund gradient estimates for the p-Laplace system. Journal Des Mathematiques Pures Et Appliquees, 2018, 114, 146-190.	0.8	28
23	New Examples on Lavrentiev Gap Using Fractals. Calculus of Variations and Partial Differential Equations, 2020, 59, 1.	0.9	26
24	Instance Optimality of the Adaptive Maximum Strategy. Foundations of Computational Mathematics, 2016, 16, 33-68.	1.5	25
25	Variable exponent trace spaces. Studia Mathematica, 2007, 183, 127-141.	0.4	24
26	Semi-implicit Euler Scheme for Generalized Newtonian Fluids. SIAM Journal on Numerical Analysis, 2006, 44, 1172-1190.	1.1	23
27	Finite Element Approximation of the $p(\cdot)$ -Laplacian. SIAM Journal on Numerical Analysis, 2015, 53, 551-572.	1.1	22
28	Besov regularity of solutions to the $p(\cdot)$ -Poisson equation. Nonlinear Analysis: Theory, Methods & Applications, 2016, 130, 298-329.	0.6	22
29	On the trace operator for functions of bounded $\varphi$ -variation. Analysis and PDE, 2020, 13, 559-594.	0.6	22
30	The inverse of the divergence operator on perforated domains with applications to homogenization problems for the compressible Navier-Stokes system. ESAIM - Control, Optimisation and Calculus of Variations, 2017, 23, 851-868.	0.7	20
31	Regularity for parabolic systems of Uhlenbeck type with Orlicz growth. Journal of Mathematical Analysis and Applications, 2019, 472, 46-60.	0.5	19
32	Existence of weak solutions for a diffuse interface model of non-Newtonian two-phase flows. Nonlinear Analysis: Real World Applications, 2014, 15, 149-157.	0.9	17
33	Lipschitz regularity for some asymptotically convex problems. ESAIM - Control, Optimisation and Calculus of Variations, 2011, 17, 178-189.	0.7	16
34	Unconditional Stability of Semi-Implicit Discretizations of Singular Flows. SIAM Journal on Numerical Analysis, 2018, 56, 1896-1914.	1.1	14
35	On Problems Driven by the $(p(\cdot), q(\cdot))$ -Laplace Operator. Mediterranean Journal of Mathematics, 2020, 17, 1.	0.4	13
36	Mini-Workshop: The p-Laplacian Operator and Applications. Oberwolfach Reports, 2013, 10, 433-482.	0.0	11

#	ARTICLE	IF	CITATIONS
37	A pointwise differential inequality and second-order regularity for nonlinear elliptic systems. <i>Mathematische Annalen</i> , 2022, 383, 1-50.	0.7	10
38	Optimal Error Estimates for a Semi-Implicit Euler Scheme for Incompressible Fluids with Shear Dependent Viscosities. <i>SIAM Journal on Numerical Analysis</i> , 2009, 47, 2177-2202.	1.1	9
39	Convex hull property and maximum principle for finite element minimisers of general convex functionals. <i>Numerische Mathematik</i> , 2013, 124, 685-700.	0.9	9
40	Optimal error estimate for semi-implicit space-time discretization for the equations describing incompressible generalized Newtonian fluids. <i>IMA Journal of Numerical Analysis</i> , 2015, 35, 680-697.	1.5	8
41	On potentials in generalized Hölder spaces over uniform domains in $\mathbb{R}^n$ . <i>Revista Matemática Complutense</i> , 2011, 24, 357-373.	0.7	7
42	A space-time DPG method for the heat equation. <i>Computers and Mathematics With Applications</i> , 2022, 105, 41-53.	1.4	7
43	Elliptic Equations with Degenerate Weights. <i>SIAM Journal on Mathematical Analysis</i> , 2022, 54, 2373-2412.	0.9	7
44	The parabolic $p$ -Laplacian with fractional differentiability. <i>IMA Journal of Numerical Analysis</i> , 2021, 41, 2110-2138.	1.5	6
45	On the Sobolev and $L^p$ -Stability of the $L^2$ -Projection. <i>SIAM Journal on Numerical Analysis</i> , 2021, 59, 2571-2607.	1.1	6
46	Homogeneous variable exponent Besov and Triebel-Lizorkin spaces. <i>Mathematische Nachrichten</i> , 2018, 291, 1177-1190.	0.4	5
47	FURTHER RESULTS ON VARIABLE EXPONENT TRACE SPACES. , 2009, , .		2
48	Continuity Points Via Riesz Potentials for $\Delta_\mu$ -Elliptic Operators. <i>Quarterly Journal of Mathematics</i> , 2020, 71, 1201-1218.	0.3	2
49	Three solutions to mixed boundary value problem driven by $p(z)$ -Laplace operator. <i>Mathematische Nachrichten</i> , 2021, 294, 1175-1185.	0.4	2
50	Dirichlet Energy Integral and Laplace Equation. <i>Lecture Notes in Mathematics</i> , 2011, , 401-436.	0.1	2
51	On the Threshold Condition for Dörfler Marking. <i>Computational Methods in Applied Mathematics</i> , 2021, 21, 557-567.	0.4	2
52	On interpolation of reflexive variable Lebesgue spaces on which the Hardy-Littlewood maximal operator is bounded. <i>Georgian Mathematical Journal</i> , 2022, .	0.2	2
53	Sharp $\gamma$ -harmonic approximation. <i>Applicable Analysis</i> , 2019, 98, 374-380.	0.6	1
54	Uniform Hölder-norm bounds for finite element approximations of second-order elliptic equations. <i>IMA Journal of Numerical Analysis</i> , 2021, 41, 1846-1898.	1.5	1

#	ARTICLE	IF	CITATIONS
55	Higher Order Regularity Shifts for the p-Poisson Problem. Lecture Notes in Computational Science and Engineering, 2021, , 1147-1155.	0.1	1
56	Parabolic weighted Sobolev-“Poincaré” type inequalities. Nonlinear Analysis: Theory, Methods & Applications, 2022, 218, 112772.	0.6	1
57	PDEs and Fluid Dynamics. Lecture Notes in Mathematics, 2011, , 437-481.	0.1	0