

Fredi Trägltzsch

List of Publications by Year in descending order

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62
papers

2,299
citations

304368

22
h-index

223531

46
g-index

66
all docs

66
docs citations

66
times ranked

712
citing authors

#	ARTICLE	IF	CITATIONS
1	Error Estimates for the Numerical Approximation of a Semilinear Elliptic Control Problem. Computational Optimization and Applications, 2002, 23, 201-229.	0.9	209
2	Supplementary results on partial differential equations. Graduate Studies in Mathematics, 2010, , 355-383.	0.0	116
3	Optimale Steuerung partieller Differentialgleichungen. , 2005, , .		107
4	Error Estimates for the Numerical Approximation of Boundary Semilinear Elliptic Control Problems. Computational Optimization and Applications, 2005, 31, 193-219.	0.9	96
5	Sufficient Second-Order Optimality Conditions for Semilinear Control Problems with Pointwise State Constraints. SIAM Journal on Optimization, 2008, 19, 616-643.	1.2	91
6	Optimal Control of PDEs with Regularized Pointwise State Constraints. Computational Optimization and Applications, 2006, 33, 209-228.	0.9	90
7	Second-Order Necessary and Sufficient Optimality Conditions for Optimization Problems and Applications to Control Theory. SIAM Journal on Optimization, 2002, 13, 406-431.	1.2	67
8	Second Order Analysis for Optimal Control Problems: Improving Results Expected From Abstract Theory. SIAM Journal on Optimization, 2012, 22, 261-279.	1.2	63
9	Second Order Sufficient Optimality Conditions for Some State-constrained Control Problems of Semilinear Elliptic Equations. SIAM Journal on Control and Optimization, 2000, 38, 1369-1391.	1.1	62
10	Second Order Optimality Conditions and Their Role in PDE Control. Deutsche Mathematiker Vereinigung Jahresbericht, 2015, 117, 3-44.	0.4	55
11	Second-order sufficient optimality conditions for the optimal control of Navier-Stokes equations. ESAIM - Control, Optimisation and Calculus of Variations, 2006, 12, 93-119.	0.7	54
12	Sparse Optimal Control of the Schlägl and FitzHugh–Nagumo Systems. Computational Methods in Applied Mathematics, 2013, 13, 415-442.	0.4	52
13	First- and Second-Order Optimality Conditions for a Class of Optimal Control Problems with Quasilinear Elliptic Equations. SIAM Journal on Control and Optimization, 2009, 48, 688-718.	1.1	51
14	Regular Lagrange Multipliers for Control Problems with Mixed Pointwise Control-State Constraints. SIAM Journal on Optimization, 2005, 15, 616-634.	1.2	49
15	On the optimal control of the Schlägl-model. Computational Optimization and Applications, 2013, 56, 153-185.	0.9	46
16	Second Order and Stability Analysis for Optimal Sparse Control of the FitzHugh–Nagumo Equation. SIAM Journal on Control and Optimization, 2015, 53, 2168-2202.	1.1	38
17	The convergence of an interior point method for an elliptic control problem with mixed control-state constraints. Computational Optimization and Applications, 2008, 39, 183-218.	0.9	30
18	A regularization method for the numerical solution of elliptic boundary control problems with pointwise state constraints. Computational Optimization and Applications, 2009, 42, 43-66.	0.9	26

#	ARTICLE	IF	CITATIONS
19	A general theorem on error estimates with application to a quasilinear elliptic optimal control problem. <i>Computational Optimization and Applications</i> , 2012, 53, 173-206.	0.9	26
20	Discrete concepts versus error analysis in PDE-constrained optimization. <i>GAMM Mitteilungen</i> , 2010, 33, 148-162.	2.7	24
21	Optimal Control of Three-Dimensional State-Constrained Induction Heating Problems with Nonlocal Radiation Effects. <i>SIAM Journal on Control and Optimization</i> , 2011, 49, 1707-1736.	1.1	24
22	The SQP method for control constrained optimal control of the Burgers equation. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2001, 6, 649-674.	0.7	23
23	Some aspects of reachability for parabolic boundary control problems with control constraints. <i>Computational Optimization and Applications</i> , 2011, 50, 75-110.	0.9	22
24	A posteriori error estimation for semilinear parabolic optimal control problems with application to model reduction by POD. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2013, 47, 555-581.	0.8	22
25	Error estimates for the finite element approximation of a semilinear elliptic control problem with state constraints and finite dimensional control space. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2010, 44, 167-188.	0.8	21
26	Second-Order Optimality Conditions for Weak and Strong Local Solutions of Parabolic Optimal Control Problems. <i>Vietnam Journal of Mathematics</i> , 2016, 44, 181-202.	0.4	21
27	On regularization methods for the numerical solution of parabolic control problems with pointwise state constraints. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2009, 15, 426-453.	0.7	20
28	On Two Optimal Control Problems for Magnetic Fields. <i>Computational Methods in Applied Mathematics</i> , 2014, 14, 555-573.	0.4	19
29	Recent advances in the analysis of pointwise state-constrained elliptic optimal control problems. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2010, 16, 581-600.	0.7	17
30	Boundary feedback stabilization of the Schrödinger system. <i>Automatica</i> , 2015, 51, 192-199.	3.0	17
31	Second-Order and Stability Analysis for State-Constrained Elliptic Optimal Control Problems with Sparse Controls. <i>SIAM Journal on Control and Optimization</i> , 2014, 52, 1010-1033.	1.1	16
32	Optimal Control of Semilinear Parabolic Equations with State-Constraints of Bottleneck Type. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 1999, 4, 595-608.	0.7	14
33	Numerical analysis of some optimal control problems governed by a class of quasilinear elliptic equations. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2011, 17, 771-800.	0.7	14
34	Unstructured Space-Time Finite Element Methods for Optimal Control of Parabolic Equations. <i>SIAM Journal of Scientific Computing</i> , 2021, 43, A744-A771.	1.3	14
35	Analytical, Optimal, and Sparse Optimal Control of Traveling Wave Solutions to Reaction-Diffusion Systems. <i>Understanding Complex Systems</i> , 2016, , 189-210.	0.3	14
36	On linear-quadratic elliptic control problems of semi-infinite type. <i>Applicable Analysis</i> , 2011, 90, 1047-1074.	0.6	13

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37	A coupled Maxwell integrodifferential model for magnetization processes. <i>Mathematische Nachrichten</i> , 2014, 287, 432-452.	0.4	13
38	Optimal control of a class of reaction–diffusion systems. <i>Computational Optimization and Applications</i> , 2018, 70, 677-707.	0.9	12
39	On an Augmented Lagrangian SQP Method for a Class of Optimal Control Problems in Banach Spaces. <i>Computational Optimization and Applications</i> , 2002, 22, 369-398.	0.9	11
40	Optimal control of magnetic fields in flow measurement. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2015, 8, 579-605.	0.6	10
41	Optimization of nonlocal time-delayed feedback controllers. <i>Computational Optimization and Applications</i> , 2016, 64, 265-294.	0.9	10
42	Optimal control of low-frequency electromagnetic fields in multiply connected conductors. <i>Optimization</i> , 2016, 65, 1651-1673.	1.0	7
43	Sparse optimal control of a phase field system with singular potentials arising in the modeling of tumor growth. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2021, 27, S26.	0.7	7
44	On some optimal control problems for electrical circuits. <i>International Journal of Circuit Theory and Applications</i> , 2014, 42, 808-830.	1.3	6
45	Error estimates for the finite element discretization of semi-infinite elliptic optimal control problems. <i>Discussiones Mathematicae: Differential Inclusions, Control and Optimization</i> , 2010, 30, 221.	0.2	6
46	First and second order optimality conditions for the control of Fokker-Planck equations. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2021, 27, 15.	0.7	5
47	SUFFICIENT SECOND ORDER OPTIMALITY CONDITIONS FOR A STATE-CONSTRAINED OPTIMAL CONTROL PROBLEM OF A WEAKLY SINGULAR INTEGRAL EQUATION. <i>Numerical Functional Analysis and Optimization</i> , 2002, 23, 173-193.	0.6	4
48	An adaptive numerical method for semi-infinite elliptic control problems based on error estimates. <i>Optimization Methods and Software</i> , 2015, 30, 492-515.	1.6	4
49	On convergence of a receding horizon method for parabolic boundary control. <i>Optimization Methods and Software</i> , 2004, 19, 201-216.	1.6	3
50	Proper orthogonal decomposition in sparse optimal control of some reaction diffusion equations using model predictive control. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 883-884.	0.2	3
51	On the switching behavior of sparse optimal controls for the one-dimensional heat equation. <i>Mathematical Control and Related Fields</i> , 2018, 8, 135-153.	0.6	3
52	Numerical Analysis of State-constrained Optimal Control Problems for PDEs. <i>International Series of Numerical Mathematics</i> , 2012, , 467-482.	1.0	3
53	State-constrained semilinear elliptic optimization problems with unrestricted sparse controls. <i>Mathematical Control and Related Fields</i> , 2020, 10, 527-546.	0.6	3
54	Optimal Control of Semiconductor Melts by Traveling Magnetic Fields. <i>Vietnam Journal of Mathematics</i> , 2019, 47, 793-812.	0.4	2

#	ARTICLE	IF	CITATIONS
55	Sparse optimal control for a semilinear heat equation with mixed control-state constraints – regularity of Lagrange multipliers. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2021, 27, 2.	0.7	2
56	Sufficient Optimality in a Parabolic Control Problem. <i>Applied Optimization</i> , 2002, , 305-316.	0.4	2
57	Stability for Semilinear Parabolic Optimal Control Problems with Respect to Initial Data. <i>Applied Mathematics and Optimization</i> , 2022, 86, .	0.8	2
58	Measure Control of a Semilinear Parabolic Equation with a Nonlocal Time Delay. <i>SIAM Journal on Control and Optimization</i> , 2018, 56, 4434-4460.	1.1	1
59	Optimal time delays in a class of reaction-diffusion equations. <i>Optimization</i> , 2019, 68, 255-278.	1.0	1
60	Exponential Stability for the Schrödinger System by Pyragas Feedback. <i>Vietnam Journal of Mathematics</i> , 2020, 48, 769-790.	0.4	1
61	Sparse optimal control for the heat equation with mixed control-state constraints. <i>Mathematical Control and Related Fields</i> , 2020, 10, 471-491.	0.6	1
62	Preface: A tribute to professor Eduardo Casas on his 60th birthday. <i>Mathematical Control and Related Fields</i> , 2018, 8, i-ii.	0.6	0