Mihai Anitescu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2771828/publications.pdf

Version: 2024-02-01

86	2,382	186265	223800
papers	citations	28 h-index	46 g-index

87	87	87	1668
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Distributed Frequency Divider for Power System Bus Frequency Online Estimation Considering Virtual Inertia From DFIGs. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2022, 12, 161-171.	3.6	10
2	Detecting Large Frequency Excursions in the Power Grid With Bayesian Decision Theory. IEEE Open Access Journal of Power and Energy, 2022, 9, 66-75.	3.4	2
3	Trust-Region Approximation of Extreme Trajectories in Power System Dynamics. IEEE Transactions on Power Systems, 2022, 37, 3937-3946.	6.5	1
4	Failure Probability Constrained AC Optimal Power Flow. IEEE Transactions on Power Systems, 2022, 37, 4683-4695.	6.5	1
5	Convergence Analysis of Fixed Point Chance Constrained Optimal Power Flow Problems. IEEE Transactions on Power Systems, 2022, 37, 4191-4201.	6.5	3
6	Order-Disorder Transitions in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mrow><mml:msub><mml:mrow><mml:mi>Ca</mml:mi></mml:mrow><mml:mrow><mml:mi>x</mml:mi></mml:mr	7.8	7
	Review Letters, 2022, 128, 095701.		
7	Exponential Decay of Sensitivity in Graph-Structured Nonlinear Programs. SIAM Journal on Optimization, 2022, 32, 1156-1183.	2.0	8
8	Multidimensional sum-up rounding for integer programming in optimal experimental design. Mathematical Programming, 2021, 185, 37-76.	2.4	6
9	A Kinetic Monte Carlo Approach for Simulating Cascading Transmission Line Failure. Multiscale Modeling and Simulation, 2021, 19, 208-241.	1.6	3
10	Flexible nonstationary spatiotemporal modeling of highâ€frequency monitoring data. Environmetrics, 2021, 32, e2670.	1.4	2
11	Power grid frequency prediction using spatiotemporal modeling. Statistical Analysis and Data Mining, 2021, 14, 662-675.	2.8	7
12	Scalable Gaussian Process Computations Using Hierarchical Matrices. Journal of Computational and Graphical Statistics, 2020, 29, 227-237.	1.7	21
13	A Real-Time Optimization with Warm-Start of Multiperiod AC Optimal Power Flows. Electric Power Systems Research, 2020, 189, 106721.	3.6	5
14	Decentralized Schemes With Overlap for Solving Graph-Structured Optimization Problems. IEEE Transactions on Control of Network Systems, 2020, 7, 1225-1236.	3.7	17
15	Overlapping Schwarz Decomposition for Constrained Quadratic Programs. , 2020, , .		6
16	Variance-Based Sensitivity Analysis of the Composite Dynamic Load Model. , 2020, , .		0
17	A Multiperiod Optimization-Based Metric of Grid Resilience. , 2019, , .		2
18	Graph Convolutional Neural Networks for Optimal Load Shedding under Line Contingency. , 2019, , .		26

#	Article	IF	Citations
19	Exponentially Convergent Receding Horizon Strategy for Constrained Optimal Control. Vietnam Journal of Mathematics, 2019, 47, 897-929.	0.8	3
20	A scalable design of experiments framework for optimal sensor placement. Journal of Process Control, 2018, 67, 44-55.	3.3	15
21	Exponentially Accurate Temporal Decomposition for Long-Horizon Linear-Quadratic Dynamic Optimization. SIAM Journal on Optimization, 2018, 28, 2541-2573.	2.0	10
22	Toward Multiperiod AC-Based Contingency Constrained Optimal Power Flow at Large Scale. , 2018, , .		8
23	Frequencyâ€“wavenumber spectral analysis of spatio-temporal flows. Journal of Fluid Mechanics, 2018, 848, 545-559.	3.4	8
24	An Inversion-Free Estimating Equations Approach for Gaussian Process Models. Journal of Computational and Graphical Statistics, 2017, 26, 98-107.	1.7	7
25	Discrete Adjoint Sensitivity Analysis of Hybrid Dynamical Systems With Switching. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 1247-1259.	5.4	18
26	A Stochastic Electricity Market Clearing Formulation with Consistent Pricing Properties. Operations Research, 2017, 65, 557-576.	1.9	47
27	Solution techniques for transient stabilityâ€constrained optimal power flow â€“ Part I. IET Generation, Transmission and Distribution, 2017, 11, 3177-3185.	2.5	34
28	MPC as a DVI: Implications on sampling rates and accuracy. , 2017, , .		2
29	A high-performance computing framework for analyzing the economic impacts of wind correlation. Electric Power Systems Research, 2016, 141, 372-380.	3.6	4
30	Dynamic security constrained optimal power flow using finite difference sensitivities. , 2014, , .		10
31	Real-Time Stochastic Optimization of Complex Energy Systems on High-Performance Computers. Computing in Science and Engineering, 2014, 16, 32-42.	1.2	91
32	Scalable Nonlinear Programming via Exact Differentiable Penalty Functions and Trust-Region Newton Methods. SIAM Journal on Optimization, 2014, 24, 528-558.	2.0	12
33	Data-driven model for solar irradiation based on satellite observations. Solar Energy, 2014, 110, 22-38.	6.1	24
34	A parallel linear solver for multilevel Toeplitz systems with possibly several right-hand sides. Parallel Computing, 2014, 40, 408-424.	2.1	6
35	A complementarity-based rolling friction model for rigid contacts. Meccanica, 2013, 48, 1643-1659.	2.0	25
36	Parallel distributed-memory simplex for large-scale stochastic LP problems. Computational Optimization and Applications, 2013, 55, 571-596.	1.6	25

#	Article	IF	Citations
37	Using Krylov subspace and spectral methods for solving complementarity problems in manyâ€body contact dynamics simulation. International Journal for Numerical Methods in Engineering, 2013, 95, 541-561.	2.8	49
38	Stochastic approximation of score functions for Gaussian processes. Annals of Applied Statistics, 2013, 7, .	1.1	39
39	Special issue in honour of Professor Florian A. Potra's 60th Birthday. Optimization Methods and Software, 2012, 27, 579-581.	2.4	0
40	The parallel solution of dense saddle-point linear systems arising in stochastic programming. Optimization Methods and Software, 2012, 27, 845-864.	2.4	15
41	Gradient-Enhanced Universal Kriging for Uncertainty Propagation. Nuclear Science and Engineering, 2012, 170, 168-195.	1.1	43
42	A Matrix-free Approach for Solving the Parametric Gaussian Process Maximum Likelihood Problem. SIAM Journal of Scientific Computing, 2012, 34, A240-A262.	2.8	46
43	Solving Large Multibody Dynamics Problems on the GPU. , 2012, , 269-280.		11
44	A preconditioning technique for Schur complement systems arising in stochastic optimization. Computational Optimization and Applications, 2012, 52, 315-344.	1.6	11
45	Comments on: Algorithms for linear programming with linear complementarity constraints. Top, 2012, 20, 26-27.	1.6	0
46	New insights into the dynamic stability of wholesale electricity markets. , 2011, , .		3
47	A Computational Framework for Uncertainty Quantification and Stochastic Optimization in Unit Commitment With Wind Power Generation. IEEE Transactions on Power Systems, 2011, 26, 431-441.	6.5	206
48	Computing $f(A)b$ via Least Squares Polynomial Approximations. SIAM Journal of Scientific Computing, 2011, 33, 195-222.	2.8	28
49	ORTHOGONAL BASES FOR POLYNOMIAL REGRESSION WITH DERIVATIVE INFORMATION IN UNCERTAINTY QUANTIFICATION. , 2011, 1, 297-320.		21
50	A matrix-free cone complementarity approach for solving large-scale, nonsmooth, rigid body dynamics. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 439-453.	6.6	101
51	GPU-Based Parallel Computing for the Simulation of Complex Multibody Systems with Unilateral and Bilateral Constraints: An Overview. Computational Methods in Applied Sciences (Springer), 2011, , 283-307.	0.3	17
52	A Convex Complementarity Approach for Simulating Large Granular Flows. Journal of Computational and Nonlinear Dynamics, 2010, 5, .	1.2	35
53	Polynomial Regression Approaches Using Derivative Information for Uncertainty Quantification. Nuclear Science and Engineering, 2010, 164, 122-139.	1.1	71
54	Optimal control of systems with discontinuous differential equations. Numerische Mathematik, 2010, 114, 653-695.	1.9	34

#	Article	IF	Citations
55	A linear assignment approach for the least-squares protein morphing problem. Mathematical Programming, 2010, 125, 195-203.	2.4	0
56	An iterative approach for cone complementarity problems forÂnonsmooth dynamics. Computational Optimization and Applications, 2010, 47, 207-235.	1.6	107
57	Achieving higher frequencies in large-scale nonlinear model predictive control. , 2010, , .		0
58	Economic impacts of advanced weather forecasting on energy system operations. , 2010, , .		13
59	Real-Time Nonlinear Optimization as a Generalized Equation. SIAM Journal on Control and Optimization, 2010, 48, 5444-5467.	2.1	75
60	A Parallel Algorithm for Solving Complex Multibody Problems With Stream Processors. , 2009, , .		2
61	Efficient sampling for spatial uncertainty quantification in multibody system dynamics applications. International Journal for Numerical Methods in Engineering, 2009, 80, 537-564.	2.8	15
62	A note on the regularity of reduced models obtained by nonlocal quasi-continuum-like approaches. Mathematical Programming, 2009, 118, 207-236.	2.4	3
63	On-line economic optimization of energy systems using weather forecast information. Journal of Process Control, 2009, 19, 1725-1736.	3.3	75
64	A computational study of the use of an optimization-based method for simulating large multibody systemsâ€. Optimization Methods and Software, 2009, 24, 871-894.	2.4	11
65	A Fast NCP Solver for Large Rigid-Body Problems with Contacts, Friction, and Joints. , 2009, , 45-55.		11
66	Large-Scale Parallel Multibody Dynamics With Frictional Contact on the GPU. , 2008, , .		2
67	Convergence of a Class of Semi-Implicit Time-Stepping Schemes for Nonsmooth Rigid Multibody Dynamics. SIAM Journal on Optimization, 2008, 19, 969-1001.	2.0	15
68	A GPU-Based Implementation of a Cone Convex Complementarity Approach for Simulating Rigid Body Dynamics With Frictional Contact. , 2008, , .		3
69	A fast contraction mapping for solving multibody systems. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1062401-1062402.	0.2	1
70	Elastic-mode algorithms for mathematical programs with equilibrium constraints: global convergence and stationarity properties. Mathematical Programming, 2007, 110, 337-371.	2.4	54
71	Optimization-based simulation of nonsmooth rigid multibody dynamics. Mathematical Programming, 2006, 105, 113-143.	2.4	87
72	A linearly implicit trapezoidal method for integrating stiff multibody dynamics with contact, joints, and friction. International Journal for Numerical Methods in Engineering, 2006, 66, 1079-1124.	2.8	39

#	Article	IF	Citations
73	On Using the Elastic Mode in Nonlinear Programming Approaches to Mathematical Programs with Complementarity Constraints. SIAM Journal on Optimization, 2005, 15, 1203-1236.	2.0	74
74	Global Convergence of an Elastic Mode Approach for a Class of Mathematical Programs with Complementarity Constraints. SIAM Journal on Optimization, 2005, 16, 120-145.	2.0	44
75	Simulating Nanoscale Processes in Solids Using DFT and the Quasicontinuum Method. , 2005, , .		2
76	A fixed-point iteration approach for multibody dynamics with contact and small friction. Mathematical Programming, 2004, 101, 3.	2.4	41
77	A constraint-stabilized time-stepping approach for rigid multibody dynamics with joints, contact and friction. International Journal for Numerical Methods in Engineering, 2004, 60, 2335-2371.	2.8	97
78	Solving Nonconvex Problems of Multibody Dynamics with Joints, Contact, and Small Friction by Successive Convex Relaxation. Mechanics Based Design of Structures and Machines, 2003, 31, 335-356.	4.7	10
79	Constraint Stabilization for Time-Stepping Approaches for Rigid Multibody Dynamics With Joints, Contact, and Friction. , 2003, , 1071.		5
80	A hard-constraint time-stepping approach for rigid multibody dynamics with joints, contact, and friction. , 2003, , .		7
81	A time-stepping method for stiff multibody dynamics with contact and friction. International Journal for Numerical Methods in Engineering, 2002, 55, 753-784.	2.8	99
82	On the rate of convergence of sequential quadratic programming with nondifferentiable exact penalty function in the presence of constraint degeneracy. Mathematical Programming, 2002, 92, 359-386.	2.4	13
83	Degenerate Nonlinear Programming with a Quadratic Growth Condition. SIAM Journal on Optimization, 2000, 10, 1116-1135.	2.0	57
84	Time-stepping for three-dimensional rigid body dynamics. Computer Methods in Applied Mechanics and Engineering, 1999, 177, 183-197.	6.6	121
85	Equivaence between different formulations of the linear complementarity promblem. Optimization Methods and Software, 1997, 7, 265-290.	2.4	35
86	Formulating Three-Dimensional Contact Dynamics Problems. Mechanics Based Design of Structures and Machines, 1996, 24, 405-437.	0.6	58