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On the implementation of an interior-point filter  
line-search algorithm for large-scale nonlinear programming

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|      |   |    |
|------|---|----|
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| 2206 | Interior-Point Approach to Trajectory Optimization. <b>2007, 30, 1228-1238</b>  | 29 |
| 2205 | . <b>2007,</b>  | 2  |
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| 2203 | Trajectory Control of Multiple Aircraft: An NMPC Approach. <b>2007, 629-639</b>   | 6  |
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| 2195 | A FAST COMPUTATIONAL FRAMEWORK FOR LARGE-SCALE MOVING HORIZON ESTIMATION. <b>2007, 40, 19-28</b>  | 4  |
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| 2191 | A Preconditioner for Linear Systems Arising From Interior Point Optimization Methods. <b>2007, 29, 1992-2007</b>                                | 35 |
| 2190 | Path-Planning with Avoidance Using Nonlinear Branch-and-Bound Optimisation. <b>2007,</b>  | 5  |

|      |   |     |
|------|---|-----|
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| 2187 | DEFT: Distributed Exponentially-Weighted Flow Splitting. <b>2007</b> ,  | 26  |
| 2186 | Optimal Design and Experimental Assessment of Time-Variable Simulated Moving Bed for Gas Separation. <b>2007</b> , 46, 6978-6988  | 13  |
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| 2183 | Prozessoptimierung: Methoden, Anwendungen und Herausforderungen. <b>2007</b> , 79, 1567-1580  | 3   |
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| 2178 | An overview of simultaneous strategies for dynamic optimization. <b>2007</b> , 46, 1043-1053  | 352 |
| 2177 | Optimal design and experimental validation of synchronous, asynchronous and flow-modulated, simulated moving-bed processes using a single-column setup. <b>2007</b> , 1162, 14-23 | 17  |
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| 2174 | Scatter search for chemical and bio-process optimization. <b>2007</b> , 37, 481-503   | 129 |
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|      |   |       |
|------|---|-------|
| 2171 | Dynamic updates of the barrier parameter in primal-dual methods for nonlinear programming. <b>2008</b> , 41, 1-25   | 17    |
| 2170 | Convergence rates for direct transcription of optimal control problems using collocation at Radau points. <b>2008</b> , 41, 81-126                            | 129   |
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| 2168 | Singular Arcs in the Generalized Goddard Problem. <b>2008</b> , 139, 439-461  | 35    |
| 2167 | A filter inexact-restoration method for nonlinear programming. <b>2008</b> , 16, 126-146  | 1     |
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| 2164 | A local convergence property of primal-dual methods for nonlinear programming. <i>Mathematical Programming</i> , <b>2008</b> , 115, 199-222                   | 2.1 9 |
| 2163 | Comparison of configurations of a four-column simulated moving bed process by multi-objective optimization. <b>2008</b> , 14, 433-442                         | 17    |
| 2162 | Fast implementations and rigorous models: Can both be accommodated in NMPC?. <b>2008</b> , 18, 800-815  | 49    |
| 2161 | Using the sequential linear integer programming method as a post-processor for stress-constrained topology optimization problems. <b>2008</b> , 76, 1544-1567 | 7     |
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|      |  |     |
|------|--|-----|
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| 2152 | Large scale optimization strategies for zone configuration of simulated moving beds. <b>2008</b> , 32, 135-144   | 19  |
| 2151 | Integrated control and process design during optimal polymer grade transition operations. <b>2008</b> , 32, 2823-2837  | 25  |
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| 2149 | Two-column simulated moving-bed process for binary separation. <b>2008</b> , 1180, 42-52   | 16  |
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| 2137 | On Augmented Lagrangian Methods with General Lower-Level Constraints. <b>2008</b> , 18, 1286-1309  | 220 |
| 2136 | A filter algorithm: comparison with NLP solvers. <b>2008</b> , 85, 667-689   | 2   |

|      |   |     |
|------|---|-----|
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| 2134 | Three-dimensional optimal deployment of a tethered subsatellite with an elastic tether. <b>2008, 85, 915-923</b>  | 10  |
| 2133 | Optimization of Polymer Electrolyte Fuel Cell Cathodes. <b>2008, 11, B193</b>   | 22  |
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| 2120 | Practical implementation of an interior point nonmonotone line search filter method. <b>2008, 85, 397-409</b>   | 6   |
| 2119 | Infinite-Horizon Control for Retrieving a Tethered Subsattellite via an Elastic Tether. <b>2008, 31, 899-906</b>  | 16  |
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|      |   |    |
|------|---|----|
| 2117 | Computing sparse Hessians with automatic differentiation. <b>2008</b> , 34, 1-15  | 16 |
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| 2112 | A decoupled approach to exemplar-based unsupervised learning. <b>2008</b> ,   | 2  |
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| 2105 | . <b>2008</b> ,   |    |
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|      |  |     |
|------|--|-----|
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| 2090 | Efficient Computation of Sparse Hessians Using Coloring and Automatic Differentiation. <b>2009</b> , 21, 209-223   | 43  |
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| 2088 | An Exact Solution Approach for Portfolio Optimization Problems Under Stochastic and Integer Constraints. <b>2009</b> , 57, 650-670   | 122 |
| 2087 | DOTcvsB, a software toolbox for dynamic optimization in systems biology. <b>2009</b> , 10, 199   | 29  |
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|      |  |     |
|------|--|-----|
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| 2068 | MPEC strategies for optimization of a class of hybrid dynamic systems. <b>2009</b> , 19, 1248-1256   | 38  |
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| 2064 | Software supporting optimal experimental design: A case study of binary diffusion using EFCOSS. <b>2009</b> , 33, 838-849  | 7   |

|      |  |    |
|------|--|----|
| 2063 | Optimization-based strategies for the operation of low-density polyethylene tubular reactors: nonlinear model predictive control. <b>2009</b> , 33, 1735-1746              | 59 |
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| 2061 | An extended mathematical programming framework. <b>2009</b> , 33, 1973-1982  | 42 |
| 2060 | Robust supply chain performance via Model Predictive Control. <b>2009</b> , 33, 2134-2143  | 29 |
| 2059 | Determination of the surface area and porosity of carbon nanotube bundles from a Langmuirian analysis of sub- and supercritical adsorption data. <b>2009</b> , 47, 948-956 | 39 |
| 2058 | Nonlinear Programming Strategies for State Estimation and Model Predictive Control. <b>2009</b> , 419-432  | 33 |
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| 2056 | A Modified Network Component Analysis (NCA) Methodology for the Decomposition of X-ray Scattering Signatures. <b>2009</b> , 48, 6137-6144                                  | 4  |
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| 2054 | Economics of harvesting age-structured fish populations. <b>2009</b> , 58, 281-299   | 92 |
| 2053 | Branch-and-Cut Algorithmic Framework for Mixed-Integer Convex Nonlinear Programs. <b>2009</b> , 48, 9119-9127  | 3  |
| 2052 | Multiobjective Programming and Goal Programming. <b>2009</b> ,   | 12 |
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|      |  |    |
|------|--|----|
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| 2036 | Optimal Harvesting of Age-structured Fish Populations. <b>2009</b> , 24, 147-169   | 39 |
| 2035 | A Moving Horizon Approach to a Chance Constrained Nonlinear Dynamic Optimization Problem*. <b>2009</b> , 42, 103-107                     | 1  |
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| 2031 | A Less Problem Dependent Approach for Optimal Trajectories with Singular Arcs: Application to Space Launchers. <b>2009</b> , 42, 130-134 |    |
| 2030 | Modelica Based Grade Change Optimization for a Polyethylene Reactor. <b>2010</b> , 43, 43-48   |    |
| 2029 | Path Planning for Lock Entering Maneuvers Using Nonlinear Programming. <b>2010</b> , 43, 58-61   | 3  |
| 2028 | Active control of bias for the control of posture and movement. <b>2010</b> , 104, 1090-102  | 10 |

2027 Performance-Constrained Transistor Sizing for Different Cell Count Minimization. **2010**, 18, 252-262

2026 Computationally Efficient, Approximate Moving Horizon State Estimation for Nonlinear Systems. **2010**, 43, 759-764

2025 Minimal Sensor Scanning Volumes for Helicopter Terrain Avoidance. **2010**,

1

2024 Mixed-integer non-linear optimal control in systems biology and biotechnology: numerical methods and a software toolbox. **2010**, 43, 314-319

6

2023 Design of Optimal Sequential Experiments to Improve Model Predictions from a Polyethylene Molecular Weight Distribution Model. **2010**, 4, 73-85

19

2022 Optimal control of a bioreactor. **2010**, 216, 2559-2575

9

2021 A null-space primal-dual interior-point algorithm for nonlinear optimization with nice convergence properties. *Mathematical Programming*, **2010**, 125, 163-193

2.1 6

2020 Perspective reformulations of mixed integer nonlinear programs with indicator variables. *Mathematical Programming*, **2010**, 124, 183-205

2.1 82

2019 Convex relaxations of non-convex mixed integer quadratically constrained programs: extended formulations. *Mathematical Programming*, **2010**, 124, 383-411

2.1 50

2018 A line search filter secant method for nonlinear equality constrained optimization. **2010**, 23, 343-361

3

2017 Optimal Management of a Bioreactor for Eutrophicated Water Treatment: A Numerical Approach. **2010**, 43, 67-91

9

2016 Switching Time Optimization for Bang-Bang and Singular Controls. **2010**, 144, 409-429

37

2015 Initialization of the Shooting Method via the Hamilton-Jacobi-Bellman Approach. **2010**, 146, 321-346

20

2014 On the Use of Outer Approximations as an External Active Set Strategy. **2010**, 146, 51-75

2

2013 On mutual impact of numerical linear algebra and large-scale optimization with focus on interior point methods. **2010**, 45, 283-310

30

2012 Second-order negative-curvature methods for box-constrained and general constrained optimization. **2010**, 45, 209-236

21

2011 Partial spectral projected gradient method with active-set strategy for linearly constrained optimization. **2010**, 53, 23-52

8

2010 A Comparison of Arithmetic Operations for Dynamic Process Optimization Approach. **2010**, 18, 80-85

5

|      |  |     |
|------|--|-----|
| 2009 | Reverberation Model-Based Decoding in the Logmelspec Domain for Robust Distant-Talking Speech Recognition. <b>2010</b> , 18, 1676-1691                           | 32  |
| 2008 | MRI pulse sequence design with first-order gradient moment nulling in arbitrary directions by solving a polynomial program. <b>2010</b> , 29, 1252-9             | 3   |
| 2007 | Solving discretized degenerate optimal control problems with state constraints. <b>2010</b> , 31, 187-199  |     |
| 2006 | Sequential and iterative architectures for distributed model predictive control of nonlinear process systems. <b>2010</b> , 56, NA-NA                            | 34  |
| 2005 | Convergence depth control for interior point methods. <b>2010</b> , 56, 3146-3161  | 65  |
| 2004 | An efficient nonlinear programming strategy for PCA models with incomplete data sets. <b>2010</b> , 24, n/a-n/a  | 2   |
| 2003 | Modified QR decomposition to avoid non-uniqueness in water supply networks with extension to adjoint calculus. <b>2010</b> , 1, 1427-1434                        | 1   |
| 2002 | A combined approach to nonlinear model predictive control of fast systems. <b>2010</b> , 20, 1092-1102   | 30  |
| 2001 | Control of mixing in a Stokes fluid flow. <b>2010</b> , 20, 1103-1115  | 8   |
| 2000 | Dynamics of Dengue epidemics when using optimal control. <b>2010</b> , 52, 1667-1673   | 44  |
| 1999 | Exact solution to the Bloch equations and application to the Hahn echo. <b>2010</b> , 206, 227-40  | 19  |
| 1998 | Cooperative pulses. <b>2010</b> , 207, 114-23  | 26  |
| 1997 | An optimal control model of oil discovery and extraction. <b>2010</b> , 217, 1163-1169   | 4   |
| 1996 | Modeling and optimization of a seeded suspension polymerization process. <b>2010</b> , 65, 4350-4362   | 32  |
| 1995 | Streamlined, two-column, simulated countercurrent chromatography for binary separation. <b>2010</b> , 1217, 3382-91  | 23  |
| 1994 | Chiral separation by two-column, semi-continuous, open-loop simulated moving-bed chromatography. <b>2010</b> , 1217, 5407-19                                     | 19  |
| 1993 | On the dynamic modeling of mammalian cell metabolism and mAb production. <b>2010</b> , 34, 210-222   | 11  |
| 1992 | Modeling and optimization with Optimica and JModelica.org languages and tools for solving large-scale dynamic optimization problems. <b>2010</b> , 34, 1737-1749 | 172 |

|      |   |    |
|------|---|----|
| 1991 | Optimal design of cryogenic air separation columns under uncertainty. <b>2010</b> , 34, 1377-1384   | 44 |
| 1990 | An equation-oriented approach for handling thermodynamics based on cubic equation of state in process optimization. <b>2010</b> , 34, 2085-2096 | 68 |
| 1989 | Mixed Integer NonLinear Programs featuring On/Off constraints: convex analysis and applications. <b>2010</b> , 36, 1153-1160                    | 6  |
| 1988 | Limit and shakedown analysis of 3D steel frames via approximate ellipsoidal yield surfaces. <b>2010</b> , 32, 1556-1567                         | 30 |
| 1987 | A non-conforming finite element for limit analysis of periodic composites. <b>2010</b> , 10, 405-406  | 7  |
| 1986 | Verified Distance Computation Between Convex Hulls of Octrees Using Interval Optimization Techniques. <b>2010</b> , 10, 651-652                 | 2  |
| 1985 | Application of the method of auxiliary sources to a defect-detection inverse problem of optical diffraction microscopy. <b>2010</b> , 5,        | 6  |
| 1984 | Um tutorial sobre métodos pseudo-espectrais para controle tempo computacional. <b>2010</b> , 21, 224-244  |    |
| 1983 | The Comparative Assessment of Modeling and Control of Mechanical Robot Manipulators. <b>2010</b> ,  | 0  |
| 1982 | Sensitivity of PEFC Models to Cathode Layer Microstructure. <b>2010</b> , 157, B1222  | 19 |
| 1981 | Model-based dereverberation in the logmelspec domain for robust distant-talking speech recognition. <b>2010</b> ,                               | 3  |
| 1980 | FILMINT: An Outer Approximation-Based Solver for Convex Mixed-Integer Nonlinear Programs. <b>2010</b> , 22, 555-567                             | 70 |
| 1979 | Improved free energy parameters for RNA pseudoknotted secondary structure prediction. <b>2010</b> , 16, 26-42                                   | 59 |
| 1978 | Estimating seasonal drivers in childhood infectious diseases with continuous time and discrete-time models. <b>2010</b> ,                       | 2  |
| 1977 | An Interior-Point Algorithm for Large-Scale Nonlinear Optimization with Inexact Step Computations. <b>2010</b> , 32, 3447-3475                  | 32 |
| 1976 | Torque demand control by nonlinear MPC with constraints for vehicles with variable valve lift engine. <b>2010</b> ,                             | 4  |
| 1975 | Discussion of three different algebraic manipulations and their influences on deterministic optimization. <b>2010</b> ,                         |    |
| 1974 | A Matrix-Free Algorithm for Equality Constrained Optimization Problems with Rank-Deficient Jacobians. <b>2010</b> , 20, 1224-1249               | 23 |

|      |   |     |
|------|---|-----|
| 1973 | Integration of vision and central pattern generator based locomotion for path planning of a non-holonomic crawling humanoid robot. <b>2010,</b>   | 2   |
| 1972 | Cross-Layer Optimization of Wireless Networks with Extended Transmission Rights. <b>2010,</b>   |     |
| 1971 | Approximate optimal control for reaching and trajectory planning in a humanoid robot. <b>2010,</b>  | 8   |
| 1970 | Computational and economic limitations of dispatch operations in the next-generation power grid. <b>2010,</b>   | 9   |
| 1969 | Emergency voltage control based on MPC, Radau collocation and moving finite elements technique. <b>2010,</b>  |     |
| 1968 | Sequential and iterative architectures for distributed model predictive control of nonlinear process systems. Part II: Application to a catalytic alkylation of benzene process. <b>2010,</b> |     |
| 1967 | The \$N-k\$ Problem in Power Grids: New Models, Formulations, and Numerical Experiments. <b>2010,</b><br>20, 2352-2380  | 127 |
| 1966 | Nonlinear Optimization. <b>2010,</b>  | 6   |
| 1965 | A performance-constrained template-based layout retargeting algorithm for analog integrated circuits. <b>2010,</b>  |     |
| 1964 | An optimal experimental design approach to model discrimination in dynamic biochemical systems. <b>2010,</b> 26, 939-45   | 58  |
| 1963 | An experimental evaluation of a novel minimum-jerk cartesian controller for humanoid robots. <b>2010,</b>   | 113 |
| 1962 | A tutorial for applying DMOC to solve optimization control problems. <b>2010,</b>   | 5   |
| 1961 | EFCOSS. <b>2010,</b> 37, 1-37   | 5   |
| 1960 | Entropy-Related Extremum Principles for Model Reduction of Dissipative Dynamical Systems. <b>2010,</b><br>12, 706-719   | 20  |
| 1959 | Estimation of seasonal transmission parameters in childhood infectious disease using a stochastic continuous time model. <b>2010,</b> 229-234   |     |
| 1958 | An Earth Pole-Sitter Using Hybrid Propulsion. <b>2010,</b>  | 4   |
| 1957 | A Unified Framework for Robust Optimization of Interplanetary Trajectories. <b>2010,</b>  | 3   |
| 1956 | Solving complex optimal control problems at no cost with PSOPT. <b>2010,</b>  | 51  |



|      |  |     |
|------|--|-----|
| 1955 | Generation of dynamic multi-contact motions: 2D case studies. <b>2010,</b>   | 7   |
| 1954 | Modelling and optimal switching pattern generation for AC to AC power converters. <b>2010,</b>   | 2   |
| 1953 | Optimal Startup/Shutdown Operating Policies with a Recombinant Strain Continuously Stirred Bioreactor. <b>2010,</b> 49, 308-316  | 0   |
| 1952 | Superstructure-Based Optimal Synthesis of Pressure Swing Adsorption Cycles for Precombustion CO2 Capture. <b>2010,</b> 49, 5066-5079                                     | 57  |
| 1951 | Fast Offset-Free Nonlinear Model Predictive Control Based on Moving Horizon Estimation. <b>2010,</b> 49, 7882-7890   | 51  |
| 1950 | Optimal management of uneven-aged Norway spruce stands. <b>2010,</b> 260, 106-115  | 97  |
| 1949 | Voltage Stability Probabilistic Assessment in Composite Systems: Modeling Unsolvability and Controllability Loss. <b>2010,</b> 25, 1575-1588                             | 37  |
| 1948 | . <b>2010,</b> 18, 811-821   | 32  |
| 1947 | Effect of Reactive Power Limit Modeling on Maximum System Loading and Active and Reactive Power Markets. <b>2010,</b> 25, 1106-1116                                      | 25  |
| 1946 | A modified mnemonic enhancement optimization method for solving parametric nonlinear programming problems. <b>2010,</b>  | 0   |
| 1945 | A Primal-Dual Exterior Point Method for Nonlinear Optimization. <b>2010,</b> 20, 3335-3363   | 7   |
| 1944 | Mapping of long-range associations throughout the fission yeast genome reveals global genome organization linked to transcriptional regulation. <b>2010,</b> 38, 8164-77 | 188 |
| 1943 | . <b>2010,</b>   | 32  |
| 1942 | Experimental Algorithms. <b>2010,</b>  | 2   |
| 1941 | Static multi-contact inverse problem for multiple humanoid robots and manipulated objects. <b>2010,</b>  | 16  |
| 1940 | Recent Advances in Optimization and its Applications in Engineering. <b>2010,</b>  | 7   |
| 1939 | Multivariable Model Predictive Control of Thin Film Surface Roughness and Slope for Light Trapping Optimization. <b>2010,</b> 49, 10510-10516                            | 2   |
| 1938 | A New Approach to Multidisciplinary Design Optimization via Internal Decomposition. <b>2010,</b>   | 0   |

|      |   |    |
|------|---|----|
| 1937 | Work assignment to and qualification of multi-skilled human resources under knowledge depreciation and company skill level targets. <b>2010</b> , 48, 3759-3781 | 55 |
| 1936 | Continuous and Discrete Composite Adjoints for the Hessian of the Lagrangian in Shooting Algorithms for Dynamic Optimization. <b>2010</b> , 31, 4675-4695       | 29 |
| 1935 | Approximations of multiobjective optimization for dynamic spectrum allocation in wireless sensor networks. <b>2010</b> ,  |    |
| 1934 | ELITE: ensemble of optimal input-pruned neural networks using TRUST-TECH. <b>2011</b> , 22, 96-109  | 21 |
| 1933 | State reconstruction from synchronized phasor measurements. <b>2011</b> ,   | 4  |
| 1932 | FEM-based static posture planning for a humanoid robot on deformable contact support. <b>2011</b> ,   | 11 |
| 1931 | Towards the grounding of abstract words: A Neural Network model for cognitive robots. <b>2011</b> ,   | 6  |
| 1930 | Monotony analysis and sparse-grid integration for nonlinear chance constrained process optimization. <b>2011</b> , 43, 1019-1041                                | 17 |
| 1929 | Model-based off-line compensation of path deviation for industrial robots in milling applications. <b>2011</b> ,  | 18 |
| 1928 | Emulating human leg impairments and disabilities on humanoid robots walking. <b>2011</b> ,  | 5  |
| 1927 | A control allocation approach to manage multiple energy sources in EVs. <b>2011</b> ,   | 5  |
| 1926 | Gas network topology optimization for upcoming market requirements. <b>2011</b> ,   | 5  |
| 1925 | Modeling and control of aggregate thin film surface morphology using stochastic PDEs and a patterned deposition rate profile. <b>2011</b> ,                     |    |
| 1924 | Neural-network representation of Voltage Stability Indices at the voltage collapse. <b>2011</b> ,   | 1  |
| 1923 | PSTD-based approach to a large-scale inverse scattering problem. <b>2011</b> ,  | 1  |
| 1922 | Investigating state reconstruction from scarce synchronized phasor measurements. <b>2011</b> ,  | 9  |
| 1921 | Imitating human reaching motions using physically inspired optimization principles. <b>2011</b> ,   | 37 |
| 1920 | Using Sparse-Grid Methods To Improve Computation Efficiency in Solving Dynamic Nonlinear Chance-Constrained Optimization Problems. <b>2011</b> , 50, 5693-5704  | 19 |

|      |   |    |
|------|---|----|
| 1919 | Random Sampling-Based Automatic Parameter Tuning for Nonlinear Programming Solvers. <b>2011</b> , 50, 3907-3918   | 10 |
| 1918 | Numerical Integration of the Chemical Rate Equations via a Discretized Adomian Decomposition. <b>2011</b> , 50, 3100-3109   | 4  |
| 1917 | Generation of Optimal Trajectories for Earth Hybrid Pole Sitters. <b>2011</b> , 34, 847-859   | 39 |
| 1916 | Fast Numerical Methods for Mixed-Integer Nonlinear Model-Predictive Control. <b>2011</b> ,  | 44 |
| 1915 | Tube-based model predictive control for nonlinear systems with unstructured uncertainty. <b>2011</b> ,  | 6  |
| 1914 | A Variational Principle for Computing Slow Invariant Manifolds in Dissipative Dynamical Systems. <b>2011</b> , 33, 703-720  | 15 |
| 1913 | Trajectory Generation for Aircraft Avoidance Maneuvers Using Online Optimization. <b>2011</b> , 34, 218-230   | 43 |
| 1912 | Robust State Estimator Based on Maximum Normal Measurement Rate. <b>2011</b> , 26, 2058-2065  | 39 |
| 1911 | Economic model predictive control using Lyapunov techniques: Handling asynchronous, delayed measurements and distributed implementation. <b>2011</b> ,                | 2  |
| 1910 | Optimization for sag-free simulations. <b>2011</b> ,  | 18 |
| 1909 | Optimal Control of Servo Actuators with Flexible Load and Coulombic Friction. <b>2011</b> , 17, 19-29   | 1  |
| 1908 | Multibody Dynamics. <b>2011</b> ,   | 2  |
| 1907 | A game-theoretical model predictive control framework for electricity markets. <b>2011</b> ,  | 2  |
| 1906 | Parameter Estimation in Batch Bioreactor Simulation Using Metabolic Models: Sequential Solution with Direct Sensitivities. <b>2011</b> , 50, 12080-12091              | 15 |
| 1905 | Stochastic Optimization Methods in Finance and Energy. <b>2011</b> ,  | 15 |
| 1904 | MINLP Solver Software. <b>2011</b> ,  | 41 |
| 1903 | Optimal control for selected cancer chemotherapy ODE models: a view on the potential of optimal schedules and choice of objective function. <b>2011</b> , 229, 123-34 | 62 |
| 1902 | Receding-Horizon Multi-Step Optimization to Correct Nonviable or Unstable Transmission Voltages. <b>2011</b> , 26, 1641-1650  | 37 |

|      |  |    |
|------|--|----|
| 1901 | Optimization as an Analysis Tool for Human Complex Problem Solving. <b>2011</b> , 21, 936-959  | 8  |
| 1900 | Comparison and Automated Selection of Local Optimization Solvers for Interval Global Optimization Methods. <b>2011</b> , 21, 1371-1391 | 2  |
| 1899 | Calibration of a polyethylene plant model for grade change optimisations. <b>2011</b> , 673-677  |    |
| 1898 | Constrained Optimization Approaches to Estimation of Structural Models. <b>2011</b> ,  | 16 |
| 1897 | A fast inversion method for highly conductive submicron wires on a substrate. <b>2011</b> , 6,   | 3  |
| 1896 | Optimal Operation of a Concentrated Solar Thermal Cogeneration Plant. <b>2011</b> , 29, 1974-1978                                      | 1  |
| 1895 | On a Primal-Dual Interior Point Filter Method. <b>2011</b> ,   |    |
| 1894 | Dynamic Optimization of Aeration Operations for a Benchmark Wastewater Treatment Plant. <b>2011</b> , 44, 14189-14194                  | 3  |
| 1893 | Optimal Control of the Process Systems Using Graphic Processing Unit. <b>2011</b> , 44, 12108-12113                                    | 1  |
| 1892 | Advanced Step Nonlinear Model Predictive Control for Two-stage Thermo Mechanical Pulping Processes*. <b>2011</b> , 44, 3653-3658       | 1  |
| 1891 | Optimal Tracking and Identification of Paths for Industrial Robots. <b>2011</b> , 44, 1126-1132  |    |
| 1890 | Constrained potential method for false vacuum decays. <b>2011</b> , 2011, 023-023  | 15 |
| 1889 | Optimization with Gradient and Hessian Information Calculated Using Hyper-Dual Numbers. <b>2011</b> ,                                  | 16 |
| 1888 | Object-Oriented Modeling and Optimal Control: A Case Study in Power Plant Start-Up. <b>2011</b> , 44, 9549-9554                        | 7  |
| 1887 | Software For Nonlinearly Constrained Optimization. <b>2011</b> ,   | 5  |
| 1886 | Logistics systems and optimisation strategies under uncertain operational environment. <b>2011</b> , 3, 327                            |    |
| 1885 | Parameter Estimation of Viscoelastic Materials: A Test Case with Different Optimization Strategies. <b>2011</b> ,                      | 2  |
| 1884 | Modeling and Optimization of a Grade Change for Multistage Polyethylene Reactors. <b>2011</b> , 44, 12331-12336                        | 1  |

|      |  |     |     |
|------|--|-----|-----|
| 1883 | Evaluation of Bottlenecks and Solution Strategies for Integration of Distributed Generation. <b>2011</b> , 44, 12189-12194   |     | 0   |
| 1882 | Interior Point Methods for Nonlinear Programs. <b>2011</b> ,   |     |     |
| 1881 | PrimalDual Methods for Nonlinear Constrained Optimization. <b>2011</b> ,   |     |     |
| 1880 | Model predictive control of nonlinear singularly perturbed systems: Application to a large-scale process network. <b>2011</b> , 21, 1296-1305  |     | 32  |
| 1879 | Multirate Lyapunov-based distributed model predictive control of nonlinear uncertain systems. <b>2011</b> , 21, 1231-1242  |     | 30  |
| 1878 | Energy-aware capacity scaling in virtualized environments with performance guarantees. <b>2011</b> , 68, 1207-1221   | 15  |     |
| 1877 | . <b>2011</b> , 57, 381-391  |     | 7   |
| 1876 | Transmission scheduling for wireless mesh networks with temporal reuse. <b>2011</b> , 2011,  |     | 0   |
| 1875 | Quantifying polymer structural component evolution using X-ray scattering and mixed-integer network component analysis. <b>2011</b> , 35, 2564-2578                                  |     |     |
| 1874 | A parametric feature-based approach to reconstructing traditional filigree jewelry. <b>2011</b> , 43, 1814-1828  |     | 10  |
| 1873 | Dynamics and control of aggregate thin film surface morphology for improved light trapping: Implementation on a large-lattice kinetic Monte Carlo model. <b>2011</b> , 66, 5955-5967 |     | 8   |
| 1872 | Numerical experiments with an inexact Jacobian trust-region algorithm. <b>2011</b> , 48, 255-271   |     | 4   |
| 1871 | Primal-dual interior-point method for thermodynamic gas-particle partitioning. <b>2011</b> , 48, 717-745   |     | 2   |
| 1870 | Dynamical estimation of neuron and network properties I: variational methods. <b>2011</b> , 105, 217-37  |     | 33  |
| 1869 | An interior-point piecewise linear penalty method for nonlinear programming. <i>Mathematical Programming</i> , <b>2011</b> , 128, 73-122   | 2.1 | 4   |
| 1868 | Convex relaxations of non-convex mixed integer quadratically constrained programs: projected formulations. <i>Mathematical Programming</i> , <b>2011</b> , 130, 359-413              | 2.1 | 46  |
| 1867 | Toward simple control for complex, autonomous robotic applications: combining discrete and rhythmic motor primitives. <b>2011</b> , 31, 155-181                                      |     | 41  |
| 1866 | Material interpolation schemes for unified topology and multi-material optimization. <b>2011</b> , 43, 811-825   |     | 141 |

|      |  |     |
|------|--|-----|
| 1865 | To bee or not to bee? Comments on Discrete optimum design of truss structures using artificial bee colony algorithm. <b>2011</b> , 44, 707-711 | 11  |
| 1864 | A secant algorithm with line search filter method for nonlinear optimization. <b>2011</b> , 35, 879-894  | 18  |
| 1863 | Implicit methods for efficient musculoskeletal simulation and optimal control. <b>2011</b> , 2, 297-316  | 99  |
| 1862 | A factorization with update procedures for a KKT matrix arising in direct optimal control. <b>2011</b> , 3, 319-348                            | 20  |
| 1861 | A recipe for finding good solutions to MINLPs. <b>2011</b> , 3, 349-390  | 23  |
| 1860 | Sparse estimation for structural variability. <b>2011</b> , 6, 12  | 2   |
| 1859 | Tube-based robust nonlinear model predictive control. <b>2011</b> , 21, 1341-1353  | 186 |
| 1858 | Computing multiple steady states in homogeneous azeotropic and ideal two-product distillation. <b>2011</b> , 57, 1485-1495                     | 15  |
| 1857 | A multiperiod nonlinear programming approach for operation of air separation plants with variable power pricing. <b>2011</b> , 57, 2421-2430   | 26  |
| 1856 | Optimal design of nonlinear temperature programmed reduction experiments. <b>2011</b> , 57, 2888-2901  | 5   |
| 1855 | On fair rate adaption in interference-limited systems. <b>2011</b> , 22, n/a-n/a   | 3   |
| 1854 | State-of-the-art, challenges, and future trends in security constrained optimal power flow. <b>2011</b> , 81, 1731-1741                        | 269 |
| 1853 | Optimal operating conditions and configurations for humidification-dehumidification desalination cycles. <b>2011</b> , 50, 779-789             | 69  |
| 1852 | Optimal operation of cryogenic air separation systems with demand uncertainty and contractual obligations. <b>2011</b> , 66, 953-963           | 34  |
| 1851 | Combining the regularization strategy and the SQP to solve MPCC: A MATLAB implementation. <b>2011</b> , 235, 5348-5356                         | 3   |
| 1850 | Numerical lower bound shakedown analysis of engineering structures. <b>2011</b> , 200, 2828-2839   | 52  |
| 1849 | Robust extensions for reduced-space barrier NLP algorithms. <b>2011</b> , 35, 1994-2004  | 6   |
| 1848 | Dynamic model of a post-combustion absorption unit for use in a non-linear model predictive control scheme. <b>2011</b> , 4, 2620-2627         | 26  |

|      |   |    |
|------|---|----|
| 1847 | Exact solution of the CPMG pulse sequence with phase variation down the echo train: application to R <sub>1</sub> measurements. <b>2011</b> , 209, 183-94   | 11 |
| 1846 | Control and optimization strategies for thermo-mechanical pulping processes: Nonlinear model predictive control. <b>2011</b> , 21, 519-528                  | 19 |
| 1845 | Constrained particle filter approach to approximate the arrival cost in Moving Horizon Estimation. <b>2011</b> , 21, 909-919                                | 53 |
| 1844 | Posture shifting after spinal cord injury using functional neuromuscular stimulation--a computer simulation study. <b>2011</b> , 44, 1639-45                | 12 |
| 1843 | Interior Point Methods for the Inverse Medium Problem on Massively Parallel Architectures. <b>2011</b> , 4, 1466-1474                                       | 1  |
| 1842 | Directly performance-constrained template-based layout retargeting and optimization for analog integrated circuits. <b>2011</b> , 44, 1-11                  | 11 |
| 1841 | A flexible state-space approach for the modeling of metabolic networks I: development of mathematical methods. <b>2011</b> , 13, 125-37                     | 6  |
| 1840 | A flexible state-space approach for the modeling of metabolic networks II: advanced interrogation of hybridoma metabolism. <b>2011</b> , 13, 138-49         | 1  |
| 1839 | Optimal time-invariant operation of a power and water cogeneration solar-thermal plant. <b>2011</b> , 85, 2295-2320   | 49 |
| 1838 | Adjoint sensitivity analysis for numerical weather prediction. <b>2011</b> ,  | 4  |
| 1837 | Stackelberg games for adversarial prediction problems. <b>2011</b> ,  | 73 |
| 1836 | A market-clearing model for spectrum trade in cognitive radio networks. <b>2011</b> ,   | 5  |
| 1835 | Collision-free trajectory generation of robotic manipulators using receding horizon strategy. <b>2011</b> ,   | 1  |
| 1834 | A Sequential Quadratic Programming Method Without A Penalty Function or a Filter for Nonlinear Equality Constrained Optimization. <b>2011</b> , 21, 545-571 | 26 |
| 1833 | Optimal balancing of robot manipulators in point-to-point motion. <b>2011</b> , 29, 233-244   | 21 |
| 1832 | Metastability bounds on flavor-violating trilinear soft terms in the MSSM. <b>2011</b> , 83,  | 13 |
| 1831 | Adaptive online control of cascading blackouts. <b>2011</b> ,   | 5  |
| 1830 | Assessing the potential of interior point barrier filter line search methods: nonmonotone versus monotone approach. <b>2011</b> , 60, 1251-1268             | 9  |

|      |   |    |
|------|---|----|
| 1829 | State and parameter estimation using unconstrained optimization. <b>2011</b> , 84, 056214   | 18 |
| 1828 | Nonlinear model predictive control of a benchmark nonlinear boiler. <b>2011</b> ,   | 2  |
| 1827 | Analysis of local optima in predictive control for energy efficient buildings. <b>2011</b> ,  | 21 |
| 1826 | Iterative learning control for nonlinear systems with input constraints and discontinuously changing dynamics. <b>2011</b> ,                  | 4  |
| 1825 | An investigation of spatial behavior in agile guidance tasks. <b>2011</b> ,   | 7  |
| 1824 | Clustering obstacle predictions to improve contingency planning for autonomous road vehicles in congested environments. <b>2011</b> ,         | 2  |
| 1823 | An atomically quantized hierarchy of shear transformation zones in a metallic glass. <b>2011</b> , 109, 053522                                | 81 |
| 1822 | Energy efficient use of compressed air in pneumatic drive systems for motion tasks. <b>2011</b> ,   | 9  |
| 1821 | Combination of Nonlinear and Linear Optimization of Transient Gas Networks. <b>2011</b> , 23, 605-617   | 50 |
| 1820 | Derivative-Free Optimization for Oil Field Operations. <b>2011</b> , 19-55  | 22 |
| 1819 | Networked and Distributed Predictive Control. <b>2011</b> ,   | 42 |
| 1818 | Multivariable model predictive control of thin film surface roughness and slope: Application to a 2D kinetic Monte-Carlo model. <b>2011</b> , |    |
| 1817 | Optimal design of a class of hybrid systems with uncertain parameters. <b>2011</b> ,  | 1  |
| 1816 | Coping with Complexity: Model Reduction and Data Analysis. <b>2011</b> ,  | 3  |
| 1815 | Optimization-based approach to path planning for closed chain robot systems. <b>2011</b> , 21, 659-670  | 10 |
| 1814 | Interior point filter method for semi-infinite programming problems. <b>2011</b> , 60, 1309-1338  | 5  |
| 1813 | A simultaneous strategy for dynamic optimization based on symbolic derivation. <b>2011</b> ,  |    |
| 1812 | An exact penalty-Lagrangian approach for large-scale nonlinear programming. <b>2011</b> , 60, 223-252   | 7  |



|      |   |    |
|------|---|----|
| 1811 | Cost function design for economically optimal grade changes for a polyethylene gas phase reactor. <b>2011,</b>  |    |
| 1810 | Optimal Control Problem for Low-Thrust Multiple Asteroid Tour Missions. <b>2011, 34, 1709-1720</b>  | 16 |
| 1809 | Analog layout retargeting using geometric programming. <b>2011, 16, 1-11</b>  | 3  |
| 1808 | Model based sustainable management of regional water supply systems. <b>2011,</b>   |    |
| 1807 | Integrated tool for simulation and optimization of a first and second generation ethanol-from-sugarcane production plant. <b>2012, 81-85</b>                      | 3  |
| 1806 | The boundedness of penalty parameters in an augmented Lagrangian method with constrained subproblems. <b>2012, 27, 1001-1024</b>                                  | 21 |
| 1805 | A Filter Algorithm with Inexact Line Search. <b>2012, 2012, 1-20</b>  | 2  |
| 1804 | Multi-scale Optimization for Advanced Energy Processes. <b>2012, 31, 51-60</b>  | 6  |
| 1803 | A nonlinear programming approach for estimation of transmission parameters in childhood infectious disease using a continuous time model. <b>2012, 9, 1983-97</b> | 8  |
| 1802 | Regularized Regression and Density Estimation based on Optimal Transport. <b>2012,</b>  | 5  |
| 1801 | Learning hash codes for efficient content reuse detection. <b>2012,</b>   | 7  |
| 1800 | Generalized fractional Maxwell model: Parameter estimation of a viscoelastic material. <b>2012,</b>   | 4  |
| 1799 | Solving non-linear arithmetic constraints in soft realtime environments. <b>2012,</b>   | 1  |
| 1798 | Optimization of Low-Thrust Spiral Trajectories by Collocation. <b>2012,</b>   | 6  |
| 1797 | Tailoring the high-harmonic emission in two-level systems and semiconductors by pulse shaping. <b>2012, 29, A36</b>   | 1  |
| 1796 | Multiphase mixed-integer optimal control framework for aircraft conflict avoidance. <b>2012,</b>  | 2  |
| 1795 | Experimental validation of a new moving horizon estimator approach for networked control systems with unsynchronized clocks. <b>2012,</b>                         | 2  |
| 1794 | Interactive multiobjective optimization for the hot rolling process. <b>2012,</b>   |    |

|      |   |    |
|------|---|----|
| 1793 | An Outer-Approximation based algorithm for solving integer non-linear programming problems for Optimal Sensor Placement. <b>2012,</b> | 3  |
| 1792 | Optimal bang-bang and singular controls in collision avoidance for participants with unequal linear speeds. <b>2012,</b>              | 1  |
| 1791 | Dynamic optimization with CasADi. <b>2012,</b>  | 15 |
| 1790 | Optimal sizing and energy management of hybrid storage systems. <b>2012,</b>  | 12 |
| 1789 | Algorithms and Software for Convex Mixed Integer Nonlinear Programs. <b>2012,</b> 1-39  | 90 |
| 1788 | Analog layout retargeting with geometric programming and constrains symbolization method. <b>2012,</b>                                | 1  |
| 1787 | Tracking performance of model predictive control. <b>2012,</b>  | 4  |
| 1786 | Implicit trajectory modelling using temporally varying weight regression for automatic speech recognition. <b>2012,</b>               | 4  |
| 1785 | Humanoid Robot Locomotion and Manipulation Step Planning. <b>2012,</b> 26, 1099-1126  | 75 |
| 1784 | Bridging the Gap: One shot grasp synthesis approach. <b>2012,</b>   | 17 |
| 1783 | Fast stochastic predictive control for building temperature regulation. <b>2012,</b>  | 7  |
| 1782 | . <b>2012,</b>  | 3  |
| 1781 | Line loss reduction with distributed energy storage systems. <b>2012,</b>   | 4  |
| 1780 | Framework for Aircraft Trajectory Planning Toward an Efficient Air Traffic Management. <b>2012,</b> 49, 341-348                       | 34 |
| 1779 | Software measurement standards for areal surface texture parameters: part 1 gorithms. <b>2012,</b> 23, 105008                         | 8  |
| 1778 | AUTONOMOUS ONLINE LEARNING OF REACHING BEHAVIOR IN A HUMANOID ROBOT. <b>2012,</b> 09, 1250017   | 33 |
| 1777 | Dynamic state and parameter estimation applied to neuromorphic systems. <b>2012,</b> 24, 1669-94                                      | 9  |
| 1776 | . <b>2012,</b>  | 2  |

|      |   |    |
|------|---|----|
| 1775 | A travelling salesman problem for a class of heterogeneous multi-vehicle systems. <b>2012,</b>  | 3  |
| 1774 | . <b>2012,</b>  | 5  |
| 1773 | Control structure selection for optimal operation of a heat exchanger network. <b>2012,</b>   | 1  |
| 1772 | Learning the reachable space of a humanoid robot: A bio-inspired approach. <b>2012,</b>   | 2  |
| 1771 | Power system set membership state estimation. <b>2012,</b>  | 1  |
| 1770 | Optimising stand management on peatlands: the case of northern Finland. <b>2012, 42, 247-259</b>  | 19 |
| 1769 | Reflections on simultaneous impact. <b>2012, 31, 1-12</b>   | 41 |
| 1768 | Predictive musculoskeletal simulation using optimal control: effects of added limb mass on energy cost and kinematics of walking and running. <b>2012, 226, 123-133</b> | 15 |
| 1767 | Single-zone Diesel PPC modeling for control. <b>2012,</b>   | 5  |
| 1766 | Optimal Autorotation With Obstacle Avoidance For A Small-Scale Flybarless Helicopter UAV. <b>2012,</b>  | 5  |
| 1765 | Optimal Design and Operation of a Solar Energy Receiver and Storage. <b>2012, 134,</b>  | 24 |
| 1764 | Simbios: an NIH national center for physics-based simulation of biological structures. <b>2012, 19, 186-9</b>   | 6  |
| 1763 | Modelling and Optimal Control of a Docking Maneuver with an Uncontrolled Satellite. <b>2012, 45, 1135-1140</b>  | 5  |
| 1762 | Estimation of Kinetic Parameters of a Polymerization Reactor using Real Data. <b>2012, 45, 685-690</b>  | 2  |
| 1761 | Inverse Parametric Quadratic Programming and an Application to Hybrid Control. <b>2012, 45, 68-73</b>   | 6  |
| 1760 | A Parallel Active-Set Strategy to Solve Sparse Parametric Quadratic Programs arising in MPC. <b>2012, 45, 74-79</b>   | 6  |
| 1759 | Limit Loads for Structural Elements Made of Heterogeneous Materials. <b>2012,</b>   |    |
| 1758 | Modeling and Analysis of Human Navigation with Crossing Interferer Using Inverse Optimal Control. <b>2012, 45, 475-480</b>  | 6  |

|      |   |     |
|------|---|-----|
| 1757 | Modeling Mixed-Integer Constrained Optimal Control Problems in AMPL. <b>2012</b> , 45, 1124-1129  | 3   |
| 1756 | A Comparative Study of Dual Active-Set and Primal-Dual Interior-Point Method. <b>2012</b> , 45, 620-625   | 2   |
| 1755 | Joint Maximum a Posteriori Smoother for State and Parameter Estimation in Nonlinear Dynamical Systems*. <b>2012</b> , 45, 900-905   | 1   |
| 1754 | Fast Suboptimal Nonlinear Model Predictive Control of an Inverted Pendulum. <b>2012</b> , 45, 442-447   | 2   |
| 1753 | Shakedown Analysis Combined With the Problem of Heat Conduction. <b>2012</b> , 134,   | 7   |
| 1752 | Advancing data assimilation in operational hydrologic forecasting: progresses, challenges, and emerging opportunities. <b>2012</b> , 16, 3863-3887  | 300 |
| 1751 | A Direct Optimization Based Tool to Determine Orbit-Raising Trajectories to GEO for All-Electric Telecommunication Satellites. <b>2012</b> ,  | 5   |
| 1750 | $\sqrt{n}$ -consistent parameter estimation for systems of ordinary differential equations: bypassing numerical integration via smoothing. <b>2012</b> , 18,                                      | 37  |
| 1749 | On the use of Markov chain models for the analysis of wind power time-series. <b>2012</b> ,   | 5   |
| 1748 | Toward Optimal Operation Conditions of Freeze-Drying Processes via a Multilevel Approach. <b>2012</b> , 30, 1432-1448   | 11  |
| 1747 | Model-based optimization of economical grade changes for the Borealis Borstar <sup>®</sup> polyethylene plant. <b>2012</b> , 46, 153-166  | 5   |
| 1746 | Global Convergence of Augmented Lagrangian Methods Applied to Optimization Problems with Degenerate Constraints, Including Problems with Complementarity Constraints. <b>2012</b> , 22, 1579-1606 | 44  |
| 1745 | Integrating Mathematical Optimization and Decision Making in Intelligent Fields. <b>2012</b> ,  | 9   |
| 1744 | Optimal Control and Applications to Aerospace: Some Results and Challenges. <b>2012</b> , 154, 713-758  | 98  |
| 1743 | State Estimation of Power System Considering Network Parameter Uncertainty Based on Parametric Interval Linear Systems. <b>2012</b> , 27, 305-313   | 42  |
| 1742 | Lagrangian Duality and Branch-and-Bound Algorithms for Optimal Power Flow. <b>2012</b> , 60, 275-285  | 47  |
| 1741 | Large-scale optimization strategies for pressure swing adsorption cycle synthesis. <b>2012</b> , 58, 3777-3791  | 36  |
| 1740 | On a relaxation method for mathematical programs with vanishing constraints. <b>2012</b> , 35, 110-130  | 12  |

|      |   |     |    |
|------|---|-----|----|
| 1739 | Optimal control of coupled multiphysics problems: Guidelines for real-life applications demonstrated for a complex fuel cell model. <b>2012</b> , 35, 146-174                       |     | 1  |
| 1738 | Numerical optimisation of process parameters for combined quasi-static and impulse forming. <b>2012</b> , 12, 625-626   |     | 2  |
| 1737 | A note on the implementation of an interior-point algorithm for nonlinear optimization with inexact step computations. <i>Mathematical Programming</i> , <b>2012</b> , 136, 209-227 | 2.1 | 12 |
| 1736 | Evaluating bound-constrained minimization software. <b>2012</b> , 53, 347-373   |     | 15 |
| 1735 | Optimal Design of Brittle Composite Materials: a Nonsmooth Approach. <b>2012</b> , 155, 962-985   |     | 3  |
| 1734 | Efficient aerodynamic shape optimization by structure exploitation. <b>2012</b> , 13, 563   |     |    |
| 1733 | Simultaneous optimization of staging and trajectory of launch vehicles using two different approaches. <b>2012</b> , 23, 85-92  |     | 18 |
| 1732 | Stability of multiobjective predictive control: A utopia-tracking approach. <b>2012</b> , 48, 2627-2632   |     | 84 |
| 1731 | Lipid production optimization and optimal control of heterotrophic microalgae fed-batch bioreactor. <b>2012</b> , 84, 619-627   |     | 38 |
| 1730 | A modified PrimalDual Logarithmic-Barrier Method for solving the Optimal Power Flow problem with discrete and continuous control variables. <b>2012</b> , 222, 616-622              |     | 12 |
| 1729 | Moving horizon estimation for networked systems with multiple packet dropouts. <b>2012</b> , 22, 1593-1608  |     | 11 |
| 1728 | Generation of multi-contact motions with passive joints: Improvement of Sitting Pivot Transfer strategy for paraplegics. <b>2012</b> ,  |     | 1  |
| 1727 | Feedforward control design for a four-rotor UAV using direct and indirect methods. <b>2012</b> ,  |     | 8  |
| 1726 | Parallel nonlinear predictive control. <b>2012</b> ,  |     | 1  |
| 1725 | A new framework for the computation of Hessians. <b>2012</b> , 27, 251-273  |     | 10 |
| 1724 | Optimal active control of a wave energy converter. <b>2012</b> ,  |     | 3  |
| 1723 | Bang-bang and singular controls in optimal control problems with partial differential equations. <b>2012</b> ,  |     | 2  |
| 1722 | Retrieving contact points without environment knowledge. <b>2012</b> ,  |     | 3  |

|      |   |     |
|------|---|-----|
| 1721 | A Methodology for the Computation of Constrained Orbits and its Application to the Design of Solar System Trajectories. <b>2012</b> , 59, 477-501                 | 3   |
| 1720 | Design of self-supporting surfaces. <b>2012</b> , 31, 1-11  | 90  |
| 1719 | A first-order convergence analysis of trust-region methods with inexact Jacobians and inequality constraints. <b>2012</b> , 27, 373-389                           | 4   |
| 1718 | A cohesive crack propagation model: Mathematical theory and numerical solution. <b>2012</b> , 12, 1705-1729   | 11  |
| 1717 | Advanced Numerical Methods for PDE Constrained Optimization with Application to Optimal Design in Navier Stokes Flow. <b>2012</b> , 257-275                       | 5   |
| 1716 | A new penalty-free-type algorithm based on trust region techniques. <b>2012</b> , 218, 11089-11099  | 6   |
| 1715 | Computational intelligence-based energy management for a large-scale PHEV/PEV enabled municipal parking deck. <b>2012</b> , 96, 171-182                           | 121 |
| 1714 | The grounding of higher order concepts in action and language: a cognitive robotics model. <b>2012</b> , 32, 165-73   | 41  |
| 1713 | Portfolio credit-risk optimization. <b>2012</b> , 36, 1604-1615   | 21  |
| 1712 | Optimization strategy for long-term catalyst deactivation in a fixed-bed reactor for methanol synthesis process. <b>2012</b> , 44, 104-126                        | 20  |
| 1711 | Fault detection and isolation and fault tolerant control of a catalytic alkylation of benzene process. <b>2012</b> , 78, 155-166                                  | 11  |
| 1710 | Surface morphology control of Transparent Conducting Oxide layers for improved light trapping using wafer grating and feedback control. <b>2012</b> , 81, 191-201 | 6   |
| 1709 | Dynamic forming limits and numerical optimization of combined quasi-static and impulse metal forming. <b>2012</b> , 54, 293-302                                   | 18  |
| 1708 | Oxidative Coupling of Methane: Optimal Operating Policies for a Membrane Reactor Network. <b>2012</b> , 84, 1980-1988   | 2   |
| 1707 | Quantitative Differentiation: A General Formulation. <b>2012</b> , 65, 1641-1670  | 6   |
| 1706 | Rare Event Simulation of Small Noise Diffusions. <b>2012</b> , 65, 1770-1803  | 55  |
| 1705 | MicrobesFlux: a web platform for drafting metabolic models from the KEGG database. <b>2012</b> , 6, 94  | 43  |
| 1704 | Supervisory Predictive Control for Long-Term Scheduling of an Integrated Wind/Solar Energy Generation and Water Desalination System. <b>2012</b> , 20, 504-512    | 53  |

|      |   |     |
|------|---|-----|
| 1703 | Practical Direct Collocation Methods for Computational Optimal Control. <b>2012</b> , 33-60                                   | 4   |
| 1702 | A Tutorial on Numerical Methods for State and Parameter Estimation in Nonlinear Dynamic Systems. <b>2012</b> , 67-88          | 1   |
| 1701 | Feature, design intention and constraint preservation for direct modeling of 3D freeform surfaces. <b>2012</b> , 3, 1         | 1   |
| 1700 | Constrained Optimization Approaches to Estimation of Structural Models. <b>2012</b> , 80, 2213-2230                           | 139 |
| 1699 | Comparing MIQCP Solvers to a Specialised Algorithm for Mine Production Scheduling. <b>2012</b> , 25-39                        | 6   |
| 1698 | Unidentifiable Attacks in Electric Power Systems. <b>2012</b> ,   | 16  |
| 1697 | Advances in mathematical programming models for enterprise-wide optimization. <b>2012</b> , 47, 2-18                          | 131 |
| 1696 | Subspace-based Identification Algorithm for characterizing causal networks in resting brain. <b>2012</b> , 60, 1236-49        | 8   |
| 1695 | Optimal sensitivity based on IPOPT. <b>2012</b> , 4, 307-331  | 78  |
| 1694 | A feasible filter SQP algorithm with global and local convergence. <b>2012</b> , 40, 261-275                                  | 3   |
| 1693 | Synthetic Gene Networks. <b>2012</b> ,  | 2   |
| 1692 | Modeling, Simulation and Optimization of Complex Processes. <b>2012</b> ,   | 1   |
| 1691 | Computational Science and Its Applications IJCCSA 2012. <b>2012</b> ,   | 1   |
| 1690 | Robust optimal design of synthetic biological networks. <b>2012</b> , 813, 45-55  | 1   |
| 1689 | State-estimation-based economic model predictive control of nonlinear systems. <b>2012</b> , 61, 926-935                      | 30  |
| 1688 | Increasing sum-rate in large-scale cognitive radio networks by centralized power and spectrum allocation. <b>2012</b> , 2012, | 1   |
| 1687 | Back Matter. <b>2012</b> , 367-382  |     |
| 1686 | Constrained Optimization and Optimal Control for Partial Differential Equations. <b>2012</b> ,                                | 17  |

|      |   |    |
|------|---|----|
| 1685 | From Humans to Humanoids: the Optimal Control Framework. <b>2012</b> , 3,   | 8  |
| 1684 | Non Linear Programming (NLP) formulation for quantitative modeling of protein signal transduction pathways. <b>2012</b> , 7, e50085                 | 12 |
| 1683 | Phi-Functions for 2D Objects Formed by Line Segments and Circular Arcs. <b>2012</b> , 2012, 1-26  | 24 |
| 1682 | Structured regularization in barrier NLP for optimization models with dependent constraints. <b>2012</b> , 31, 1502-1506                            |    |
| 1681 | The Geography of Grocery Demand in the UK: An Evaluation of the 2003 Morrisons-Safeway Merger. <b>2012</b> ,  | 3  |
| 1680 | Genome-scale metabolic flux analysis of <i>Streptomyces lividans</i> growing on a complex medium. <b>2012</b> , 161, 1-13                           | 36 |
| 1679 | Nonlinear Model Predictive Control of a CO <sub>2</sub> Post-Combustion Absorption Unit. <b>2012</b> , 35, 445-454                                  | 35 |
| 1678 | Shakedown analysis with multidimensional loading spaces. <b>2012</b> , 49, 477-485  | 28 |
| 1677 | Local path-following property of inexact interior methods in nonlinear programming. <b>2012</b> , 52, 209-238                                       | 5  |
| 1676 | Mixed-integer nonlinear programs featuring $\bar{n}/\text{off}$ constraints. <b>2012</b> , 52, 537-558  | 41 |
| 1675 | A Hybrid Differential Dynamic Programming Algorithm for Constrained Optimal Control Problems. Part 2: Application. <b>2012</b> , 154, 418-442       | 31 |
| 1674 | A Hybrid Differential Dynamic Programming Algorithm for Constrained Optimal Control Problems. Part 1: Theory. <b>2012</b> , 154, 382-417            | 47 |
| 1673 | Handling infeasibility in a large-scale nonlinear optimization algorithm. <b>2012</b> , 60, 263-277   | 11 |
| 1672 | A penalty-interior-point algorithm for nonlinear constrained optimization. <b>2012</b> , 4, 181-209   | 13 |
| 1671 | An Algorithm for Optimization of Cereal Output. <b>2012</b> , 119, 113-127  | 1  |
| 1670 | Design of optimal earth pole-sitter transfers using low-thrust propulsion. <b>2012</b> , 79, 253-268  | 13 |
| 1669 | Feature-based 3D morphing based on geometrically constrained spherical parameterization. <b>2012</b> , 29, 2-17                                     | 10 |
| 1668 | Controlling aggregate thin film surface morphology for improved light trapping using a patterned deposition rate profile. <b>2012</b> , 67, 101-110 | 3  |



|      |   |     |
|------|---|-----|
| 1667 | Modeling and control of Transparent Conducting Oxide layer surface morphology for improved light trapping. <b>2012</b> , 74, 135-147            | 7   |
| 1666 | Comparison of various ternary simulated moving bed separation schemes by multi-objective optimization. <b>2012</b> , 1238, 105-13               | 41  |
| 1665 | Mathematical modeling and trajectory planning of mobile manipulators with flexible links and joints. <b>2012</b> , 36, 3229-3244                | 53  |
| 1664 | Global and local convergence of a class of penalty-free-type methods for nonlinear programming. <b>2012</b> , 36, 3201-3216                     | 8   |
| 1663 | Solving dynamic optimization infeasibility problems. <b>2012</b> , 36, 227-246  | 2   |
| 1662 | A new algorithm for contact detection between convex polygonal and polyhedral particles in the discrete element method. <b>2012</b> , 44, 73-82 | 105 |
| 1661 | Shakedown analysis of engineering structures with limited kinematical hardening. <b>2012</b> , 49, 2177-2186                                    | 34  |
| 1660 | A methodology for meta-model based optimization in building energy models. <b>2012</b> , 47, 292-301  | 175 |
| 1659 | A Production Inventory Model for a PushPull Manufacturing System with Capacity and Service Level Constraints. <b>2012</b> , 21, 668-681         | 16  |
| 1658 | Designing optimal universal pulses using second-order, large-scale, non-linear optimization. <b>2012</b> , 219, 61-74                           | 17  |
| 1657 | Evaluating kinetic models for preferential CO-oxidation catalysts using optimization-based parameter estimation. <b>2012</b> , 210, 402-408     | 2   |
| 1656 | How to verify optimal controls computed by direct shooting methods? [A tutorial]. <b>2012</b> , 22, 494-507                                     | 22  |
| 1655 | A Moving Horizon Estimator for processes with multi-rate measurements: A Nonlinear Programming sensitivity approach. <b>2012</b> , 22, 677-688  | 51  |
| 1654 | An augmented penalty function method with penalty parameter updates for nonconvex optimization. <b>2012</b> , 75, 1158-1167                     | 13  |
| 1653 | . <b>2012</b> , 80, 38-46   | 93  |
| 1652 | Maximum margin Bayesian network classifiers. <b>2012</b> , 34, 521-32   | 35  |
| 1651 | Simulated Moving Bed Chromatography: From Concept to Proof-of-Concept. <b>2012</b> , 35, 17-34  | 59  |
| 1650 | An approach to variable time receding horizon control. <b>2012</b> , 33, 401-414  | 11  |

|      |   |     |
|------|---|-----|
| 1649 | Continuation from a flat to a round Earth model in the coplanar orbit transfer problem. <b>2012</b> , 33, 654-675   | 16  |
| 1648 | A discretization method for the numerical solution of Dieudonné-Bashevsky type problems with application to edge detection within noisy image data. <b>2012</b> , 33, 276-301 | 5   |
| 1647 | Economic model predictive control of nonlinear process systems using Lyapunov techniques. <b>2012</b> , 58, 855-870   | 240 |
| 1646 | Rounding-based heuristics for nonconvex MINLPs. <b>2012</b> , 4, 1-31   | 28  |
| 1645 | Modelling and optimising the passage of tangency discontinuities in NC linear paths. <b>2012</b> , 58, 631-642  | 3   |
| 1644 | Parameter identification in financial market models with a feasible point SQP algorithm. <b>2012</b> , 51, 1137-1161  | 2   |
| 1643 | Augmented Lagrangian method with nonmonotone penalty parameters for constrained optimization. <b>2012</b> , 51, 941-965   | 34  |
| 1642 | Dual extragradient algorithms extended to equilibrium problems. <b>2012</b> , 52, 139-159   | 88  |
| 1641 | Lagrangian Relaxations on Networks by $\mathbb{E}$ Subgradient Methods. <b>2012</b> , 152, 51-74  | 0   |
| 1640 | Optimal Topological Simplification of Discrete Functions on Surfaces. <b>2012</b> , 47, 347-377   | 28  |
| 1639 | GloMIQO: Global mixed-integer quadratic optimizer. <b>2013</b> , 57, 3-50   | 147 |
| 1638 | Bound reduction using pairs of linear inequalities. <b>2013</b> , 56, 787-819   | 10  |
| 1637 | Deterministic global optimization in ab-initio quantum chemistry. <b>2013</b> , 56, 537-558   | 2   |
| 1636 | Inexact Restoration for Euler Discretization of Box-Constrained Optimal Control Problems. <b>2013</b> , 156, 726-760  | 20  |
| 1635 | A trust-region framework for constrained optimization using reduced order modeling. <b>2013</b> , 14, 3-35  | 44  |
| 1634 | Improved constraint consensus methods for seeking feasibility in nonlinear programs. <b>2013</b> , 54, 555-578  | 6   |
| 1633 | Combining Lagrangian decomposition and excessive gap smoothing technique for solving large-scale separable convex optimization problems. <b>2013</b> , 55, 75-111             | 17  |
| 1632 | A smoothing-regularization approach to mathematical programs with vanishing constraints. <b>2013</b> , 55, 733-767  | 20  |

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|------|---|-----|
| 1631 | Fast nonlinear model predictive control: Formulation and industrial process applications. <b>2013</b> , 51, 55-64   | 47  |
| 1630 | Green Growth and Sustainable Development. <b>2013</b> ,   | 5   |
| 1629 | Experimental Algorithms. <b>2013</b> ,  | 1   |
| 1628 | Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems. <b>2013</b> ,  | 3   |
| 1627 | Penalty-Based Nonlinear Solver for Optimal Reactive Power Dispatch With Discrete Controls. <b>2013</b> , 28, 2174-2182  | 39  |
| 1626 | Contingency Planning Over Probabilistic Obstacle Predictions for Autonomous Road Vehicles. <b>2013</b> , 29, 913-929  | 49  |
| 1625 | Functional Approximation of Power System Steady-State Voltage Stability Limits by Artificial Neural Networks. <b>2013</b> , 24, 544-554   | 2   |
| 1624 | A tri-dimensional filter SQP algorithm for variational inequality problems. <b>2013</b> , 32, 549-562   | 1   |
| 1623 | Optimal Active Catalyst and Inert Distribution in Catalytic Packed Bed Reactors: ortho-Xylene Oxidation. <b>2013</b> , 52, 15311-15320  | 25  |
| 1622 | TACO: a toolkit for AMPL control optimization. <b>2013</b> , 5, 227-265   | 7   |
| 1621 | Error bounds for initial value problems by optimization. <b>2013</b> , 17, 1345-1356  | 1   |
| 1620 | Verified distance computation between non-convex superquadrics using hierarchical space decomposition structures. <b>2013</b> , 17, 1367-1378   | 1   |
| 1619 | Approximating optimal controls for networks when there are combinations of population-level and targeted measures available: chlamydia infection as a case-study. <b>2013</b> , 75, 1747-77 | 10  |
| 1618 | Robust delay-constrained routing in telecommunications. <b>2013</b> , 206, 163-181  | 30  |
| 1617 | A Hierarchical Decomposition Approach for Coordinated Dispatch of Plug-in Electric Vehicles. <b>2013</b> , 28, 2768-2778  | 142 |
| 1616 | Dynamic Modeling and Parameter Estimation for Unit Operations in Lignocellulosic Bioethanol Production. <b>2013</b> , 52, 4146-4160   | 12  |
| 1615 | Simplified hydraulic modelling in model predictive control of flood mitigation measures along rivers. <b>2013</b> , 1, 17-27  | 9   |
| 1614 | Model Predictive Control of a Nonlinear Large-Scale Process Network Used in the Production of Vinyl Acetate. <b>2013</b> , 52, 12463-12481  | 7   |

|      |  |     |      |
|------|--|-----|------|
| 1613 | Optimizing process economics online using model predictive control. <b>2013</b> , 58, 334-343  |     | 104  |
| 1612 | Product sampling during transient continuous countercurrent hydrolysis of canola oil and development of a kinetic model. <b>2013</b> , 58, 144-155 |     | 10   |
| 1611 | PROTON: An automatic place-and-route tool for optical Networks-on-Chip. <b>2013</b> ,  |     | 14   |
| 1610 | Predictive optimal control for thermo-mechanical pulping processes with multi-stage low consistency refining. <b>2013</b> , 23, 1001-1011          |     | 21   |
| 1609 | Nonlinear coal mill modeling and its application to model predictive control. <b>2013</b> , 21, 308-320  |     | 22   |
| 1608 | Multiphase Mixed-Integer Optimal Control Approach to Aircraft Trajectory Optimization. <b>2013</b> , 36, 1267-1277                                 |     | 49   |
| 1607 | Local Solutions of the Optimal Power Flow Problem. <b>2013</b> , 28, 4780-4788   |     | 117  |
| 1606 | A selective strategy for shakedown analysis of engineering structures. <b>2013</b> , 94, 985-1014  |     | 19   |
| 1605 | On the generation of a variety of grasps. <b>2013</b> , 61, 1335-1349  |     | 16   |
| 1604 | Observability-based local path planning and obstacle avoidance using bearing-only measurements. <b>2013</b> , 61, 1392-1405                        |     | 18   |
| 1603 | Optimal location of controllers for the one-dimensional wave equation. <b>2013</b> , 30, 1097-1126   |     | 32   |
| 1602 | Development of a Multilevel Multidisciplinary-Optimization Capability for an Industrial Environment. <b>2013</b> , 51, 2335-2352                   |     | 34   |
| 1601 | A feasible method for optimization with orthogonality constraints. <i>Mathematical Programming</i> , <b>2013</b> , 142, 397-434                    | 2.1 | 387  |
| 1600 | Topology optimization approaches. <b>2013</b> , 48, 1031-1055  |     | 1240 |
| 1599 | Generating human-like reaching movements with a humanoid robot: A computational approach. <b>2013</b> , 4, 269-284                                 |     | 14   |
| 1598 | 3D chromosome modeling with semi-definite programming and Hi-C data. <b>2013</b> , 20, 831-46  |     | 86   |
| 1597 | . <b>2013</b> ,  |     | 6    |
| 1596 | Risk averse elastic shape optimization with parametrized fine scale geometry. <i>Mathematical Programming</i> , <b>2013</b> , 141, 383-403         | 2.1 | 9    |

|      |   |     |    |
|------|---|-----|----|
| 1595 | A robust optimization approach to experimental design for model discrimination of dynamical systems. <i>Mathematical Programming</i> , <b>2013</b> , 141, 405-433 | 2.1 | 6  |
| 1594 | Estimating confidence intervals in predicted responses for oscillatory biological models. <b>2013</b> , 7, 71   |     | 9  |
| 1593 | . <b>2013</b> , 28, 1073-1082   |     | 2  |
| 1592 | Defending against Unidentifiable Attacks in Electric Power Grids. <b>2013</b> , 24, 1961-1971   |     | 19 |
| 1591 | Optimal Active Control and Optimization of a Wave Energy Converter. <b>2013</b> , 4, 324-332  |     | 64 |
| 1590 | Time-optimal path planning for flat systems with application to a wheeled mobile robot. <b>2013</b> ,   |     | 4  |
| 1589 | A framework for nonlinear model-predictive control using object-oriented modeling with a case study in power plant start-up. <b>2013</b> ,                        |     | 2  |
| 1588 | Cooperative human robot interaction systems: IV. Communication of shared plans with Naïve humans using gaze and speech. <b>2013</b> ,                             |     | 14 |
| 1587 | The Coordinating Role of Language in Real-Time Multimodal Learning of Cooperative Tasks. <b>2013</b> , 5, 3-17  |     | 32 |
| 1586 | Active network management: Planning under uncertainty for exploiting load modulation. <b>2013</b> ,   |     | 11 |
| 1585 | Mapping and Analysis of Human Guidance Performance From Trajectory Ensembles. <b>2013</b> , 43, 32-45   |     | 10 |
| 1584 | Optimal control of a Two-Mass Skate bicycle without steering. <b>2013</b> ,   |     |    |
| 1583 | Finding Interpolating Curves Minimizing $L^\infty$ Acceleration in the Euclidean Space via Optimal Control Theory. <b>2013</b> , 51, 442-464                      |     | 6  |
| 1582 | Research in Computational Molecular Biology. <b>2013</b> ,  |     | 9  |
| 1581 | Airborne Wind Energy Based on Dual Airfoils. <b>2013</b> , 21, 1215-1222  |     | 40 |
| 1580 | Fully decentralized AC optimal power flow algorithms. <b>2013</b> ,   |     | 40 |
| 1579 | From global to local convergence of interior methods for nonlinear optimization. <b>2013</b> , 28, 1051-1080  |     | 14 |
| 1578 | Generation of whole-body optimal dynamic multi-contact motions. <b>2013</b> , 32, 1104-1119   |     | 94 |

|      |  |     |    |
|------|--|-----|----|
| 1577 | The Effect of Wind Power Integration on the Frequency of Tap Changes of a Substation Transformer. <b>2013</b> , 28, 4320-4327  |     | 12 |
| 1576 | Optimal control of a switched reluctance drive by a direct method using a discrete variational principle. <b>2013</b> ,  |     | 3  |
| 1575 | A criticality criterion to decrease the computational burden in multistage distribution system optimal power flow. <b>2013</b> ,   |     |    |
| 1574 | . <b>2013</b> ,  |     | 1  |
| 1573 | Time-optimal path following for robots with object collision avoidance using lagrangian duality. <b>2013</b> ,   |     | 3  |
| 1572 | The travelling salesman problem with neighbourhoods: MINLP solution. <b>2013</b> , 28, 364-378   |     | 38 |
| 1571 | Chance constrained optimal power flow with non-Gaussian distributed uncertain wind power generation. <b>2013</b> ,   |     | 6  |
| 1570 | Economic model predictive control of a transport-reaction process. <b>2013</b> ,   |     |    |
| 1569 | Power Flow Optimization for Smart Microgrids by SDP Relaxation on Linear Networks. <b>2013</b> , 4, 751-762  |     | 31 |
| 1568 | A new contact detection algorithm for three-dimensional non-spherical particles. <b>2013</b> , 248, 94-102   |     | 57 |
| 1567 | Equation-Oriented Optimization on an Industrial High-Density Polyethylene Slurry Process with Target Molecular Weight Distribution. <b>2013</b> , 52, 7240-7251  |     | 16 |
| 1566 | A generalized scattering data decomposition framework for determining network process-structure-property relationships in polymer materials. <b>2013</b> , 64, 555-577   |     |    |
| 1565 | Uniform boundedness of the inverse of a Jacobian matrix arising in regularized interior-point methods. <i>Mathematical Programming</i> , <b>2013</b> , 137, 587-592  | 2.1 | 11 |
| 1564 | . <b>2013</b> , 21, 504-512  |     | 55 |
| 1563 | Solution of Chemical Dynamic Optimization Using the Simultaneous Strategies. <b>2013</b> , 21, 55-63   |     | 25 |
| 1562 | Simultaneous analysis of large INTEGRAL/SPI11Based on observations with INTEGRAL, an ESA project with instruments and science data center funded by ESA member states (especially the PI countries: Denmark, France, Germany, Italy, Spain, and Switzerland), Czech Republic and Poland with participation of Russia and the USA. datasets: Optimizing the computation of the solution and |     | 3  |
| 1561 | insolubility using sparse matrix algorithms. <b>2013</b> , 1, 59-69  |     | 4  |
| 1560 | Real-Time Optimization Strategies for Building Systems□ <b>2013</b> , 52, 3137-3150  |     | 50 |

|      |  |     |
|------|--|-----|
| 1559 | . 2013,  | 2   |
| 1558 | Improved Swing-Cut Modeling for Planning and Scheduling of Oil-Refinery Distillation Units. 2013, 52, 18324-18333                          | 35  |
| 1557 | Direct evaluation of the limit states of engineering structures exhibiting limited, nonlinear kinematical hardening. 2013, 42, 141-167     | 38  |
| 1556 | A restoration-free filter SQP algorithm for equality constrained optimization. 2013, 219, 6016-6029  | 6   |
| 1555 | Generalization of norm optimal ILC for nonlinear systems with constraints. 2013, 39, 280-296   | 37  |
| 1554 | A decomposition approach for a new test-scenario in complex problem solving. 2013, 4, 245-254  | 5   |
| 1553 | Convergence analysis of a regularized interior point algorithm for the barrier problems with singular solutions. 2013, 438, 4654-4671      |     |
| 1552 | Algorithms for improved fixed-time performance of Lyapunov-based economic model predictive control of nonlinear systems. 2013, 23, 404-414 | 24  |
| 1551 | Optimal trajectory planning for trains [A pseudospectral method and a mixed integer linear programming approach. 2013, 29, 97-114          | 119 |
| 1550 | Proactive fault-tolerant model predictive control. 2013, 59, 2810-2820   | 26  |
| 1549 | Optimizations Under Uncertainty Using Gradients, Hessians, and Surrogate Models. 2013, 51, 444-451   | 23  |
| 1548 | Analysis of local optima in predictive control for energy efficient buildings. 2013, 6, 236-255  | 25  |
| 1547 | Occupancy-based zone-climate control for energy-efficient buildings: Complexity vs. performance. 2013, 106, 209-221                        | 154 |
| 1546 | Reactor modeling and recipe optimization of polyether polyol processes: Polypropylene glycol. 2013, 59, 2515-2529                          | 36  |
| 1545 | Barrier NLP methods with structured regularization for optimization of degenerate optimization problems. 2013, 57, 24-29                   | 4   |
| 1544 | Optimal Control of the Extractive Distillation for the Production of Fuel-Grade Ethanol. 2013, 52, 8471-8487                               | 11  |
| 1543 | Mixed-integer nonlinear optimization* 2013, 22, 1-131  | 376 |
| 1542 | Global and local convergence of a penalty-free method for nonlinear programming. 2013, 65, 589-608   | 3   |

|      |   |     |
|------|---|-----|
| 1541 | Simplified Reaction Models for Combustion in Gas Turbine Combustion Chambers. <b>2013</b> , 161-182   |     |
| 1540 | Process Systems Engineering, 5. Process Dynamics, Control, Monitoring, and Identification. <b>2013</b> ,  | 1   |
| 1539 | On the impact of symmetry-breaking constraints on spatial Branch-and-Bound for circle packing in a square. <b>2013</b> , 161, 96-106  | 11  |
| 1538 | Adaptive cross approximation of tensors arising in the discretization of boundary integral operator shape derivatives. <b>2013</b> , 37, 60-67  | 3   |
| 1537 | Supervised Novelty Detection. <b>2013</b> ,   | 4   |
| 1536 | An Approximate Expectation Maximization Algorithm for Estimating Parameters, Noise Variances, and Stochastic Disturbance Intensities in Nonlinear Dynamic Models. <b>2013</b> , 52, 18303-18323 | 8   |
| 1535 | A New MPLS-Based Forwarding Paradigm for Multi-Radio Wireless Mesh Networks. <b>2013</b> , 12, 3968-3979  | 11  |
| 1534 | Optimal operation of a solar-thermal power plant with energy storage and electricity buy-back from grid. <b>2013</b> , 51, 61-70  | 43  |
| 1533 | Constraint consensus concentration for identifying disjoint feasible regions in nonlinear programmes. <b>2013</b> , 28, 339-363   | 6   |
| 1532 | Optimal Guidance Based on Receding Horizon Control and Online Trajectory Optimization. <b>2013</b> , 26, 786-793  | 16  |
| 1531 | Exploring affordances and tool use on the iCub. <b>2013</b> ,   | 41  |
| 1530 | Flatness Based Trajectory Generation For A Helicopter UAV. <b>2013</b> ,  | 1   |
| 1529 | Integer-grid maps for reliable quad meshing. <b>2013</b> , 32, 1-12   | 132 |
| 1528 | Identification Of A Nonlinear Grey-Box Helicopter UAV Model. <b>2013</b> ,  | 1   |
| 1527 | Inverse dynamic hair modeling with frictional contact. <b>2013</b> , 32, 1-10   | 27  |
| 1526 | On the equilibrium of simplicial masonry structures. <b>2013</b> , 32, 1-10   | 55  |
| 1525 | Actions, action sequences and habits: evidence that goal-directed and habitual action control are hierarchically organized. <b>2013</b> , 9, e1003364   | 121 |
| 1524 | Evaluating the Path Integral. <b>2013</b> , 85-124  |     |



|      |   |    |
|------|---|----|
| 1523 | Optimization and Security Challenges in Smart Power Grids. <b>2013,</b>   | 15 |
| 1522 | Learning a real time grasping strategy. <b>2013,</b>  | 8  |
| 1521 | Encyclopedia of Systems and Control. <b>2013,</b> 1-11  | 2  |
| 1520 | A Continuation Method for the Efficient Solution of Parametric Optimization Problems in Kinetic Model Reduction. <b>2013,</b> 35, A1584-A1603 | 5  |
| 1519 | On fixed-time performance of Lyapunov-based economic model predictive control of nonlinear systems. <b>2013,</b>                              |    |
| 1518 | Model predictive control applied to the long-term hydrothermal scheduling of the Brazilian power system. <b>2013,</b>                         | 2  |
| 1517 | . <b>2013,</b>  | 1  |
| 1516 | Controllability and optimal strokes for N-link microswimmer. <b>2013,</b>   | 14 |
| 1515 | Unifying dynamic economic optimization and model predictive control for optimal process operation. <b>2013,</b>                               | 1  |
| 1514 | A Lyapunov function for periodic economic optimizing Model Predictive Control. <b>2013,</b>   | 31 |
| 1513 | Enhanced Identification of Process Parameters in Technological Forming. <b>2013,</b> 13, 403-404  |    |
| 1512 | Global Optimization of Nonlinear Network Design. <b>2013,</b> 23, 268-295   | 16 |
| 1511 | Time-optimal parking and flying: Solving path following problems efficiently. <b>2013,</b>  | 3  |
| 1510 | An efficient overloaded method for computing derivatives of mathematical functions in MATLAB. <b>2013,</b> 39, 1-36                           | 33 |
| 1509 | A Statistical Model and Estimation of Disease Rates as Functions of Age and Time. <b>2013,</b> 35, B511-B528                                  | 3  |
| 1508 | Ranking the good points: A comprehensive method for humanoid robots to grasp unknown objects. <b>2013,</b>                                    | 13 |
| 1507 | Locally Injective Mappings. <b>2013,</b> 32, 125-135  | 92 |
| 1506 | Optimal operation of process plants under partial shutdown conditions. <b>2013,</b> 59, 4151-4168   | 11 |

|      |  |    |
|------|--|----|
| 1505 | Nonlinear non-convex optimization of hydraulic networks. <b>2013,</b>  |    |
| 1504 | . <b>2013,</b>   |    |
| 1503 | Torque allocation in electric vehicles with in-wheel motors: A performance-oriented approach. <b>2013</b>      | 5  |
| 1502 | Energy-efficient control of an air handling unit for a single-zone VAV system. <b>2013,</b>                    | 7  |
| 1501 | Comparison of numerical methods in the contrast imaging problem in NMR. <b>2013,</b>                           | 0  |
| 1500 | Solvers chaining in the IDOS server for dynamic optimization. <b>2013,</b>                                     | 1  |
| 1499 | Nonlinear model predictive control of IGCC plants with membrane reactors for carbon capture. <b>2013,</b>      | 2  |
| 1498 | Models and methodology for optimal vehicle maneuvers applied to a hairpin turn. <b>2013,</b>                   | 4  |
| 1497 | Optimal control and state estimation of lithium-ion batteries using reformulated models. <b>2013,</b>          | 24 |
| 1496 | Proactive fault-tolerant model predictive control: Concept and application. <b>2013,</b>                       |    |
| 1495 | Semismooth equation approach to Network Utility Maximization (NUM). <b>2013,</b>                               |    |
| 1494 | . <b>2013,</b>   | 21 |
| 1493 | Advanced starting point strategy for solving parametric DAE optimization problems. <b>2013,</b>                |    |
| 1492 | Optimal control of crystallization of alpha-lactose monohydrate. <b>2013,</b>                                  | 3  |
| 1491 | Advances in Architectural Geometry 2012. <b>2013,</b>  | 3  |
| 1490 | Optimization Under Mixed Aleatory/Epistemic Uncertainty Using Derivatives. <b>2013,</b>                        |    |
| 1489 | Pivoting strategies for tough sparse indefinite systems. <b>2013,</b> 40, 1-19                                 | 17 |
| 1488 | Online Make-to-Order Joint Replenishment Model: Primal-Dual Competitive Algorithms. <b>2013,</b> 61, 1014-1029 | 18 |

|      |   |    |
|------|---|----|
| 1487 | A decomposition-based optimal control approach for aircraft conflict avoidance performed by velocity regulation. <b>2013,</b>                 | 2  |
| 1486 | Non-Linear Model Predictive Control Applied to a Generic Ocean-Wave Energy Extractor. <b>2013,</b>  | 6  |
| 1485 | Robust design under mixed aleatory/epistemic uncertainties using gradients and surrogates. <b>2013,</b><br>1,                                 | 7  |
| 1484 | Uses of GPU Powered Interval Optimization for Parameter Identification in the Context of SO Fuel Cells. <b>2013,</b> 46, 558-563              | 4  |
| 1483 | Differentiation Tool Efficiency Comparison for Nonlinear Model Predictive Control Applied to Oil Gathering Systems.. <b>2013,</b> 46, 821-826 | 1  |
| 1482 | Computer-assisted counting of retinal cells by automatic segmentation after TV denoising. <b>2013,</b><br>13, 59                              | 3  |
| 1481 | An Investigation of Optimal Vehicle Maneuvers for Different Road Conditions. <b>2013,</b> 46, 66-71   | 9  |
| 1480 | UAV Path Planning for Multitarget Tracking with Experiments*. <b>2013,</b> 46, 316-323  | 2  |
| 1479 | Design of Optimal Experiments for Parameter Estimation of Microalgae Growth Models. <b>2013,</b> 46, 315-320                                  | 1  |
| 1478 | Model-Based Dynamic Optimization with OpenModelica and CasADi. <b>2013,</b> 46, 446-451   | 4  |
| 1477 | Using Pyomo and IPOPT for Optimization of Reservoir Flood Control Operation. <b>2013,</b>   | 0  |
| 1476 | Using Adaptive Sparse Grids to Solve High-Dimensional Dynamic Models. <b>2013,</b>  | 7  |
| 1475 | Optimization-based autonomous remote sensing of surface objects using an unmanned aerial vehicle. <b>2013,</b>                                |    |
| 1474 | Robust nonlinear model predictive control of a batch bioreactor using multi-stage stochastic programming. <b>2013,</b>                        | 10 |
| 1473 | A Universal Attack Against Histogram-Based Image Forensics. <b>2013,</b> 5, 35-52   | 13 |
| 1472 | Time-optimal quadrotor flight. <b>2013,</b>   | 8  |
| 1471 | Modelling and identification of the dominant phenomena in hydrogen fuel-cells by the application of DRT Analysis. <b>2013,</b> 283-288        | 2  |
| 1470 | Optimal design of boundary observers for the wave equation. <b>2014,</b> 45, 475-484  |    |

|      |  |     |
|------|--|-----|
| 1469 | Software Tools for Nonlinear Optimization. <b>2014</b> , 32, 536-541   | 2   |
| 1468 | Time Optimal Control of Four-in-Wheel-Motors Driven Electric Cars. <b>2014</b> , 58, 149-159   | 5   |
| 1467 | A statistical approach for inferring the 3D structure of the genome. <b>2014</b> , 30, i26-33  | 149 |
| 1466 | Efficient Simulation and Reformulation of Lithium-Ion Battery Models for Enabling Electric Transportation. <b>2014</b> , 161, E3149-E3157    | 57  |
| 1465 | Integrated Design of Control Actuator Layer and Economic Model Predictive Control for Nonlinear Processes. <b>2014</b> , 53, 20000-20012     | 4   |
| 1464 | TimeMesh Refinement in Optimal Control Problems for Nonholonomic Vehicles. <b>2014</b> , 17, 178-185   | 5   |
| 1463 | Iterative linear cuts strenghtening the second-order cone relaxation of the distribution system optimal power flow problem. <b>2014</b> ,    | 3   |
| 1462 | Active Sampling for Subjective Image Quality Assessment. <b>2014</b> ,   | 12  |
| 1461 | Trajectory optimization and tracking control of mobile robots based on DMOC. <b>2014</b> ,   | 2   |
| 1460 | Optimal control for a Formula One car with variable parameters. <b>2014</b> , 52, 653-678  | 77  |
| 1459 | BLOM: The Berkeley Library for Optimization Modeling. <b>2014</b> ,  | 5   |
| 1458 | A distributed algorithm for fast optimal power flow regulation in Smart Grids. <b>2014</b> ,   | 2   |
| 1457 | Transmission System Restoration: Co-optimization of repairs, load pickups, and generation dispatch. <b>2014</b> ,                            | 7   |
| 1456 | Relaxations for multi-period optimal power flow problems with discrete decision variables. <b>2014</b> ,                                     | 3   |
| 1455 | Vertical ladder climbing by the HRP-2 humanoid robot. <b>2014</b> ,  | 23  |
| 1454 | Annotation of genomics data using bidirectional hidden Markov models unveils variations in Pol II transcription cycle. <b>2014</b> , 10, 768 | 17  |
| 1453 | Dynamic estimation of specific fluxes in metabolic networks using non-linear dynamic optimization. <b>2014</b> , 8, 132                      | 16  |
| 1452 | A general NMPC framework for a diesel engine air path. <b>2014</b> , 1-21  | 5   |

|      |  |    |
|------|--|----|
| 1451 | Equation-oriented Optimization of Cryogenic Systems for Coal Oxycombustion Power Generation. <b>2014</b> , 63, 421-430                                       | 9  |
| 1450 | Efficient Sequencing of Industrial Robots through Optimal Control. <b>2014</b> , 23, 194-199   | 5  |
| 1449 | Constraint-Based Prioritized Trajectory Planning for Multibody Systems. <b>2014</b> , 30, 1227-1234  | 5  |
| 1448 | A three-stage optimization method for dynamic optimal power flow. <b>2014</b> ,  |    |
| 1447 | Energy-efficient control of under-actuated HVAC zones in buildings. <b>2014</b> ,  | 3  |
| 1446 | Time optimal control of ground vehicles. <b>2014</b> ,   |    |
| 1445 | Study of a primal-dual algorithm for equality constrained minimization. <b>2014</b> , 59, 405-433  | 13 |
| 1444 | A parametric multi-convex splitting technique with application to real-time NMPC. <b>2014</b> ,  | 4  |
| 1443 | . <b>2014</b> ,  |    |
| 1442 | Estimation of Specific Fluxes in Metabolic Networks using Non-linear Dynamic Optimization. <b>2014</b> , 33, 289-294   |    |
| 1441 | Stochastic optimal planning of solar thermal power. <b>2014</b> ,  | 4  |
| 1440 | PostBL: Post-mesh Boundary Layer Mesh Generation Tool. <b>2014</b> , 331-348   | 1  |
| 1439 | Revisiting Individual Discipline Feasible using matrix-free Inexact-Newton-Krylov. <b>2014</b> ,   | 2  |
| 1438 | An interior-point method for efficient solution of block-structured NLP problems using an implicit Schur-complement decomposition. <b>2014</b> , 71, 563-573 | 34 |
| 1437 | Introducing State Constraints in Optimal Control for Health Problems. <b>2014</b> , 17, 415-422  | 7  |
| 1436 | Multi-stage Nonlinear Model Predictive Control with verified robust constraint satisfaction. <b>2014</b> ,   | 18 |
| 1435 | A Flexible Environment for Accurate Simulation, Optimization, and Verification of SOFC Models. <b>2014</b> ,   |    |
| 1434 | Nonlinear Model Predictive Control Applied to a Generic Ocean-Wave Energy Extractor1. <b>2014</b> , 136,   | 15 |

|      |  |     |
|------|--|-----|
| 1433 | Optimal Control of Diesel Engines: Numerical Methods, Applications, and Experimental Validation. <b>2014</b> , 2014, 1-21  | 23  |
| 1432 | Partitioned Quasi-Newton Approximation for Direct Collocation Methods and Its Application to the Fuel-Optimal Control of a Diesel Engine. <b>2014</b> , 2014, 1-6              | 1   |
| 1431 | A Novel Penalty Approach for Nonlinear Dynamic Optimization Problems With Inequality Path Constraints. <b>2014</b> , 59, 2863-2867   | 37  |
| 1430 | Optimal Charging Profiles with Minimal Intercalation-Induced Stresses for Lithium-Ion Batteries Using Reformulated Pseudo 2-Dimensional Models. <b>2014</b> , 161, F3144-F3155 | 44  |
| 1429 | GPOPS-II. <b>2014</b> , 41, 1-37   | 480 |
| 1428 | Auxiliary signal design for failure detection in high index differential-algebraic equations. <b>2014</b> ,  | 3   |
| 1427 | A novel method for modelling cardinality and rank constraints. <b>2014</b> ,   | 3   |
| 1426 | Economic multi-stage output nonlinear model predictive control. <b>2014</b> ,  | 8   |
| 1425 | A Multi-Stage Optimization Formulation for MPC-Based Obstacle Avoidance in Autonomous Vehicles Using a LIDAR Sensor. <b>2014</b> ,   | 16  |
| 1424 | A Realistic Flight Path Parameterization for Calculation of Noise Minimal Trajectories using Bi-level Optimal Control. <b>2014</b> ,   | 1   |
| 1423 | Asynchronous auxiliary signal design for failure detection. <b>2014</b> ,  | 1   |
| 1422 | Control configuration selection for economic model predictive control. <b>2014</b> ,   |     |
| 1421 | Integration of non-inclusive contacts in posture generation. <b>2014</b> ,   | 3   |
| 1420 | An environment for the efficient testing and implementation of robust NMPC. <b>2014</b> ,  | 9   |
| 1419 | Computing equal risk contribution portfolios. <b>2014</b> , 58, 5:1-5:12   | 7   |
| 1418 | Robust Optimizations of Structural and Aerodynamic Designs. <b>2014</b> ,  | 1   |
| 1417 | Optimal Solar Sail Interplanetary Heteroclinic Transfers for Novel Space Applications. <b>2014</b> ,   |     |
| 1416 | Optimal control strategies for oil production under gas coning conditions. <b>2014</b> ,   | 2   |

|      |   |    |
|------|---|----|
| 1415 | Action-value comparisons in the dorsolateral prefrontal cortex control choice between goal-directed actions. <b>2014</b> , 5, 4390  | 33 |
| 1414 | Equivalent networks for medium-term hydro-thermal scheduling with variable head cascaded reservoirs and transmission constraints. <b>2014</b> ,                             | 2  |
| 1413 | What Is the Optimal Shape of a Fin for One-Dimensional Heat Conduction?. <b>2014</b> , 74, 1194-1218  | 4  |
| 1412 | Operation strategies for energy storage systems in distribution networks. <b>2014</b> ,   | 6  |
| 1411 | Automatic kinematic chain calibration using artificial skin: Self-touch in the iCub humanoid robot. <b>2014</b> ,   | 23 |
| 1410 | Control of towing kites under uncertainty using robust economic nonlinear model predictive control. <b>2014</b> ,   | 8  |
| 1409 | Analyzing the effects of comfort relaxation on energy demand flexibility of buildings: A multiobjective optimization approach. <b>2014</b> , 85, 416-426                    | 21 |
| 1408 | Relationship between jump landing kinematics and peak ACL force during a jump in downhill skiing: a simulation study. <b>2014</b> , 24, e180-7                              | 35 |
| 1407 | Parallel Solution of Nonlinear Contingency-constrained Network Problems. <b>2014</b> , 34, 705-710  | 2  |
| 1406 | Stochastic optimal enhancement of distributed formation control using Kalman smoothers. <b>2014</b> , 32, 305-324   | 3  |
| 1405 | Smart manufacturing: Handling preventive actuator maintenance and economics using model predictive control. <b>2014</b> , 60, 2179-2196                                     | 20 |
| 1404 | An approximate expectation maximisation algorithm for estimating parameters in nonlinear dynamic models with process disturbances. <b>2014</b> , 92, 835-850                | 10 |
| 1403 | Selection of control configurations for economic model predictive control systems. <b>2014</b> , 60, 3230-3242  | 27 |
| 1402 | Development and Nonlinear Analysis of Dynamic Plant Models in ProMoT /Diana. <b>2014</b> , 86, 1107-1116  | 11 |
| 1401 | Expanding the exploration of the criterion space for multi-objective optimal control problems. <b>2014</b> ,  |    |
| 1400 | An optimization-based undeflated PLS (OUPLS) method to handle missing data in the training set. <b>2014</b> , 28, 575-584   | 3  |
| 1399 | Reconstruction of transcription factor profiles from fluorescent protein reporter systems via dynamic optimization and Tikhonov regularization. <b>2014</b> , 60, 3754-3761 | 0  |
| 1398 | Numerical Comparison of Optimization Methods for Process Parameters Identification in Forming Technology. <b>2014</b> , 14, 797-798   |    |

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|------|--|----|
| 1397 | Design and analysis of demand-adapted railway timetables. <b>2014</b> , 48, 119-137  | 75 |
| 1396 | Vectorising Bitmaps into Semi-Transparent Gradient Layers. <b>2014</b> , 33, 11-19   | 17 |
| 1395 | Optimal AC Distribution Systems Reconfiguration. <b>2014</b> ,   | 9  |
| 1394 | Multi-Objective Control of Balancing Systems for Li-Ion Battery Packs: A Paradigm Shift?. <b>2014</b> ,  | 19 |
| 1393 | Trajectory optimization for walking robots with series elastic actuators. <b>2014</b> ,  | 5  |
| 1392 | The effect of non-cooperative distributed energy storage on aggregated load profile under real-time pricing. <b>2014</b> ,                                   |    |
| 1391 | Conceptual Design and Optimisation of Chemical Processes under Uncertainty by Two-Stage Programming. <b>2014</b> , 34, 435-440                               | 2  |
| 1390 | . <b>2014</b> ,  | 1  |
| 1389 | Implementation of model predictive control for an HVAC system in a mid-size commercial building. <b>2014</b> , 20, 121-135                                   | 68 |
| 1388 | Computationally Efficient Model Predictive Control Algorithms. <b>2014</b> ,   | 59 |
| 1387 | Encyclopedia of Thermal Stresses. <b>2014</b> , 2704-2707  |    |
| 1386 | Structured nonconvex optimization of large-scale energy systems using PIPS-NLP. <b>2014</b> ,  | 21 |
| 1385 | Optimization of Smoothing Control in Hybrid Wind and Battery Energy Storage System. <b>2014</b> , 852, 703-707   | 1  |
| 1384 | A penalty function for reactive power optimization with discrete variables. <b>2014</b> ,  | 1  |
| 1383 | Predictive Control in Power Electronics and Drives: Basic Concepts, Theory, and Methods. <b>2014</b> , 181-226   | 39 |
| 1382 | Encyclopedia of Thermal Stresses. <b>2014</b> , 2627-2636  |    |
| 1381 | Primal and dual bounds for Optimal Transmission Switching. <b>2014</b> ,   | 18 |
| 1380 | Achieving Fair Spectrum Allocation and Reduced Spectrum Handoff in Wireless Sensor Networks: Modeling via Biobjective Optimization. <b>2014</b> , 2014, 1-12 | 3  |



|      |  |     |
|------|--|-----|
| 1379 | Quad Layout Embedding via Aligned Parameterization. <b>2014</b> , 33, 69-81  | 37  |
| 1378 | Mitigating the risks of supply disruption under stochastic demand. <b>2014</b> , 9, 157-168  | 12  |
| 1377 | Nonlinear modeling, estimation and predictive control in APMonitor. <b>2014</b> , 70, 133-148  | 105 |
| 1376 | On-line state estimation of nonlinear dynamic systems with gross errors. <b>2014</b> , 70, 149-159   | 35  |
| 1375 | Autonomous online generation of a motor representation of the workspace for intelligent whole-body reaching. <b>2014</b> , 62, 556-567               | 15  |
| 1374 | Inference of building occupancy signals using moving horizon estimation and Fourier regularization. <b>2014</b> , 24, 714-722                        | 10  |
| 1373 | Optimal capacity management and planning in services delivery centers. <b>2014</b> , 80, 63-81   | 2   |
| 1372 | Railway Rapid Transit Timetables with Variable and Elastic Demand. <b>2014</b> , 111, 538-548  | 4   |
| 1371 | Direct Methods for Limit States in Structures and Materials. <b>2014</b> ,   | 7   |
| 1370 | Transistor sizing of custom high-performance digital circuits with parametric yield considerations. <b>2014</b> , 15, 217-241                        | 2   |
| 1369 | Moving Horizon SINR Estimation for Wireless Networked Systems. <b>2014</b> , 10, 431-438   | 7   |
| 1368 | A synthesis approach of distributed model predictive control for homogeneous multi-agent system with collision avoidance. <b>2014</b> , 87, 52-63    | 38  |
| 1367 | Packing unequal circles into a strip of minimal length with a jump algorithm. <b>2014</b> , 8, 949-970   | 20  |
| 1366 | Integrating dynamic economic optimization and model predictive control for optimal operation of nonlinear process systems. <b>2014</b> , 22, 242-251 | 68  |
| 1365 | Optimal Time-varying Operation of Nonlinear Process Systems with Economic Model Predictive Control. <b>2014</b> , 53, 4991-5001                      | 15  |
| 1364 | Modeling and dynamic optimization of fuel-grade ethanol fermentation using fed-batch process. <b>2014</b> , 22, 231-241                              | 16  |
| 1363 | Energy-Optimal Multi-Goal Motion Planning for Planar Robot Manipulators. <b>2014</b> , 163, 80-104   | 7   |
| 1362 | Interior-point methods for nonconvex nonlinear programming: cubic regularization. <b>2014</b> , 58, 323-346  | 15  |

|      |  |    |
|------|--|----|
| 1361 | Mathematical optimization for challenging network planning problems in unbundled liberalized gas markets. <b>2014</b> , 5, 449-473             | 26 |
| 1360 | Stochastic optimal control model for natural gas networks. <b>2014</b> , 64, 103-113   | 52 |
| 1359 | Shakedown analysis of nozzles in the knuckle region of torispherical heads under multiple thermo-mechanical loadings. <b>2014</b> , 116, 47-55 | 9  |
| 1358 | Optimizing Wind Power Hosting Capacity of Distribution Systems Using Cost Benefit Analysis. <b>2014</b> , 29, 1436-1445                        | 34 |
| 1357 | Bounds on Eigenvalues of Matrices Arising from Interior-Point Methods. <b>2014</b> , 24, 49-83   | 33 |
| 1356 | Scalable Nonlinear Programming via Exact Differentiable Penalty Functions and Trust-Region Newton Methods. <b>2014</b> , 24, 528-558           | 9  |
| 1355 | Economic model predictive control with time-varying objective function for nonlinear process systems. <b>2014</b> , 60, 507-519                | 41 |
| 1354 | Optimal operation of a membrane reactor network. <b>2014</b> , 60, 170-180   | 7  |
| 1353 | Parameter set selection for dynamic systems under uncertainty via dynamic optimization and hierarchical clustering. <b>2014</b> , 60, 181-192  | 9  |
| 1352 | Dynamic Optimization in Environmental Economics. <b>2014</b> ,   |    |
| 1351 | RENS. <b>2014</b> , 6, 33-54   | 33 |
| 1350 | An Optimization Approach to Kinetic Model Reduction for Combustion Chemistry. <b>2014</b> , 92, 885-902  | 3  |
| 1349 | A class of distributed optimization methods with event-triggered communication. <b>2014</b> , 57, 517-553                                      | 19 |
| 1348 | A numerical method for nonconvex multi-objective optimal control problems. <b>2014</b> , 57, 685-702   | 38 |
| 1347 | A globally convergent method for finding all steady-state solutions of distillation columns. <b>2014</b> , 60, 410-414                         | 4  |
| 1346 | A bilevel NLP sensitivity-based decomposition for dynamic optimization with moving finite elements. <b>2014</b> , 60, 966-979                  | 16 |
| 1345 | Getting Robustness Against Unstructured Uncertainty: A Tube-Based MPC Approach. <b>2014</b> , 59, 1290-1295                                    | 38 |
| 1344 | Comparison of Mixed-Integer Programming and Genetic Algorithm Methods for Distributed Generation Planning. <b>2014</b> , 29, 833-843           | 35 |

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|------|--|-----|
| 1343 | Derivative-based hybrid heuristics for continuous-time simulation optimization. <b>2014</b> , 46, 164-175  | 3   |
| 1342 | A Duality Approach for Solving Control-Constrained Linear-Quadratic Optimal Control Problems. <b>2014</b> , 52, 1423-1456  | 10  |
| 1341 | A tutorial review of economic model predictive control methods. <b>2014</b> , 24, 1156-1178  | 400 |
| 1340 | Robust moving horizon estimation based output feedback economic model predictive control. <b>2014</b> , 68, 101-109  | 35  |
| 1339 | Distributed Optimal Power Flow Using ADMM. <b>2014</b> , 29, 2370-2380   | 288 |
| 1338 | Suboptimal Predictive Control for Satellite Detumbling. <b>2014</b> , 37, 850-859  | 15  |
| 1337 | Simultaneous Optimal Design and Control of an Extractive Distillation System for the Production of Fuel Grade Ethanol Using a Mathematical Program with Complementarity Constraints. <b>2014</b> , 53, 752-764 | 8   |
| 1336 | Generalized Traveling Salesman Problem for Carrier-Vehicle Systems. <b>2014</b> , 37, 766-774  | 19  |
| 1335 | Distributed RHC for Tracking and Formation of Nonholonomic Multi-Vehicle Systems. <b>2014</b> , 59, 1439-1453  | 117 |
| 1334 | Maximum a posteriori state path estimation: Discretization limits and their interpretation. <b>2014</b> , 50, 1360-1368  | 21  |
| 1333 | Optimal Stabilization Using Lyapunov Measures. <b>2014</b> , 59, 1316-1321   | 21  |
| 1332 | Selecting radiotherapy dose distributions by means of constrained optimization problems. <b>2014</b> , 76, 1017-44   | 12  |
| 1331 | A cyclic time-dependent Markov process to model daily patterns in wind turbine power production. <b>2014</b> , 67, 557-568   | 13  |
| 1330 | Mission analysis and systems design of a near-term and far-term pole-sitter mission. <b>2014</b> , 94, 455-469   | 11  |
| 1329 | The Pre-Kernel as a Tractable Solution for Cooperative Games. <b>2014</b> ,  | 1   |
| 1328 | Coordination Between OLTC and SVC for Voltage Regulation in Unbalanced Distribution System Distributed Generation. <b>2014</b> , 29, 289-299   | 111 |
| 1327 | Optimal charging profiles for mechanically constrained lithium-ion batteries. <b>2014</b> , 16, 277-87   | 47  |
| 1326 | Convex quadratic relaxations of nonconvex quadratically constrained quadratic programs. <b>2014</b> , 29, 120-136  | 11  |

|      |   |     |
|------|---|-----|
| 1325 | On the behaviour of constrained optimization methods when Lagrange multipliers do not exist. <b>2014</b> , 29, 646-657                                      | 7   |
| 1324 | Multi-Class Supervised Novelty Detection. <b>2014</b> , 36, 2510-23   | 28  |
| 1323 | An interior point method for nonlinear programming with infeasibility detection capabilities. <b>2014</b> , 29, 837-854                                     | 12  |
| 1322 | Interactive dynamic optimization server $\square$ connecting one modelling language with many solvers. <b>2014</b> , 29, 1118-1138                          | 4   |
| 1321 | Optimal operation of Energy Storage in distribution systems with Renewable Energy Resources. <b>2014</b> ,  | 9   |
| 1320 | Optimal control problems with incomplete and different integral time domains in the objective and constraints. <b>2014</b> , 78, 2883-2895                  | 12  |
| 1319 | . <b>2014</b> ,   | 1   |
| 1318 | Bayesian model update in a horizon estimation framework. <b>2014</b> ,  |     |
| 1317 | 2, Norm optimal model reduction for optimal control problems subject to parabolic and hyperbolic evolution equations. <b>2014</b> , 35, 501-523             |     |
| 1316 | Models and methodology for optimal trajectory generation in safety-critical road vehicle manoeuvres. <b>2014</b> , 52, 1304-1332                            | 43  |
| 1315 | Model predictive control approach to online computation of demand-side flexibility of commercial buildings HVAC systems for Supply Following. <b>2014</b> , | 41  |
| 1314 | . <b>2014</b> ,   | 1   |
| 1313 | Challenges in the application of mathematical programming in the enterprise-wide optimization of process industries. <b>2014</b> , 48, 555-573              | 23  |
| 1312 | Optimization of Running Strategies Based on Anaerobic Energy and Variations of Velocity. <b>2014</b> , 74, 1615-1636  | 14  |
| 1311 | Global and local convergence of a nonmonotone SQP method for constrained nonlinear optimization. <b>2014</b> , 59, 435-473                                  | 3   |
| 1310 | Nonlinear programming strategies for dynamic chemical process optimization. <b>2014</b> , 48, 541-554   | 15  |
| 1309 | An Adaptable Robot Vision System Performing Manipulation Actions With Flexible Objects. <b>2014</b> , 11, 749-765   | 40  |
| 1308 | Model predictive control: Recent developments and future promise. <b>2014</b> , 50, 2967-2986   | 977 |

|      |  |    |
|------|--|----|
| 1307 | Stabilization of nonlinear sampled-data systems and economic model predictive control application. <b>2014,</b>  | 5  |
| 1306 | Rolling Stochastic Optimization based operation of distribution systems with PVs and Energy Storages. <b>2014,</b>   | 1  |
| 1305 | Multiobjective Optimization Using Goal Programming for Industrial Water Network Design. <b>2014,</b><br>53, 17722-17735  | 28 |
| 1304 | Robustifying optimal experiment design for nonlinear, dynamic (bio)chemical systems. <b>2014,</b> 71, 415-425  | 24 |
| 1303 | Efficient solution of the diesel-engine optimal control problem by time-domain decomposition. <b>2014,</b> 30, 34-44   | 2  |
| 1302 | . <b>2014,</b>   | 3  |
| 1301 | An Inexact Sequential Quadratic Optimization Algorithm for Nonlinear Optimization. <b>2014,</b> 24, 1041-1074  | 13 |
| 1300 | Trajectory optimization of pneumatically actuated, redundant continuum manipulators. <b>2014,</b>  | 8  |
| 1299 | Efficient cubature rules for the numerical integration of logarithmic singularities. <b>2014,</b>  |    |
| 1298 | Image and Video Technology. <b>2014,</b>   | 1  |
| 1297 | Estimating the biophysical properties of neurons with intracellular calcium dynamics. <b>2014,</b> 89, 062714  | 5  |
| 1296 | Minimum-time manoeuvring in electric vehicles with four wheel-individual-motors. <b>2014,</b> 52, 824-846  | 19 |
| 1295 | Temporally Varying Weight Regression: A Semi-Parametric Trajectory Model for Automatic Speech Recognition. <b>2014,</b> 22, 151-160                            | 8  |
| 1294 | An Outer-Inner Approximation for Separable Mixed-Integer Nonlinear Programs. <b>2014,</b> 26, 31-44  | 22 |
| 1293 | Flight trajectory design in the presence of contrails: Application of a multiphase mixed-integer optimal control approach. <b>2014,</b> 48, 172-194            | 25 |
| 1292 | Scale-up analysis of continuous cross-flow atomic layer deposition reactor designs. <b>2014,</b> 117, 301-317  | 5  |
| 1291 | Dynamic optimization based integrated operation strategy design for passive cooling ventilation and active building air conditioning. <b>2014,</b> 85, 126-135 | 18 |
| 1290 | A starting-point strategy for interior-point algorithms for shakedown analysis of engineering structures. <b>2014,</b> 46, 648-668                             | 8  |

|      |  |        |
|------|--|--------|
| 1289 | Multi-stage scenario generation by the combined moment matching and scenario reduction method. <b>2014</b> , 42, 374-377                                       | 17     |
| 1288 | Systematic optimization and experimental validation of ternary simulated moving bed chromatography systems. <b>2014</b> , 1356, 82-95                          | 18     |
| 1287 | Economic model predictive control of parabolic PDE systems using empirical eigenfunctions. <b>2014</b> ,   |        |
| 1286 | On finite-time and infinite-time cost improvement of economic model predictive control for nonlinear systems. <b>2014</b> , 50, 2561-2569                      | 44     |
| 1285 | Sufficient conditions for strong local optimality in optimal control problems with $L_2$ -type objectives and control constraints. <b>2014</b> , 19, 2657-2679 | 9      |
| 1284 | Reactor Modeling and Recipe Optimization of Ring-Opening Polymerization: Block Copolymers. <b>2014</b> , 53, 7434-7446   | 9      |
| 1283 | Solving difficult mixed integer and disjunctive non-linear problems on single and parallel processors. <b>2014</b> , 24, 385-405                               | 5      |
| 1282 | Short-term management of hydropower assets of the Federal Columbia River Power System. <b>2014</b> , 2, 25-32  | 24     |
| 1281 | Optimal Trajectory Generation Using Model Predictive Control for Aerially Towed Cable Systems. <b>2014</b> , 37, 525-539                                       | 23     |
| 1280 | Trajectory and Spacecraft Design for a Pole-Sitter Mission. <b>2014</b> , 51, 311-326  | 27     |
| 1279 | . <b>2014</b> , 63, 3062-3076  | 78     |
| 1278 | Second Order Sufficient Conditions for Optimal Control Problems with Non-unique Minimizers: An Abstract Framework. <b>2014</b> , 70, 411-442                   | 1      |
| 1277 | Dynamical estimation of neuron and network properties III: network analysis using neuron spike times. <b>2014</b> , 108, 261-73                                | 5      |
| 1276 | Undercover: a primal MINLP heuristic exploring a largest sub-MIP. <i>Mathematical Programming</i> , <b>2014</b> , 144, 315-346                                 | 2.1 21 |
| 1275 | Efficient parallel solution of large-scale nonlinear dynamic optimization problems. <b>2014</b> , 59, 667-688  | 18     |
| 1274 | A filter-based artificial fish swarm algorithm for constrained global optimization: theoretical and practical issues. <b>2014</b> , 60, 239-263                | 11     |
| 1273 | Globally convergent DC trust-region methods. <b>2014</b> , 59, 209-225   | 3      |
| 1272 | Linearization-based algorithms for mixed-integer nonlinear programs with convex continuous relaxation. <b>2014</b> , 59, 343-365                               | 1      |

|      |   |    |
|------|---|----|
| 1271 | Optimal control of nonlinear hydraulic networks in the presence of disturbance. <b>2014</b> , 75, 539-548   | 3  |
| 1270 | Performance Monitoring of Economic Model Predictive Control Systems. <b>2014</b> , 53, 15406-15413  | 2  |
| 1269 | Application of a Gyrostatic Rigid Body Formulation in the Context of a Direct Transcription Method for Optimal Control in Multibody Dynamics. <b>2014</b> , 237-253                       | 1  |
| 1268 | Inexact Interior-Point Method for PDE-Constrained Nonlinear Optimization. <b>2014</b> , 36, A1251-A1276   | 8  |
| 1267 | Optimal control of a semilinear parabolic equation with singular arcs. <b>2014</b> , 29, 964-978  | 3  |
| 1266 | Short-term optimal operation of water systems using ensemble forecasts. <b>2014</b> , 71, 200-208   | 53 |
| 1265 | Optimal Localization of Pressure Reducing Valves in Water Distribution Systems by a Reformulation Approach. <b>2014</b> , 28, 3057-3074   | 29 |
| 1264 | A dwindling filter algorithm with a modified subproblem for nonlinear inequality constrained optimization. <b>2014</b> , 35, 209-224  | 0  |
| 1263 | Optimization of algorithms with OPAL. <b>2014</b> , 6, 233-254  | 15 |
| 1262 | Performance analysis of linear and nonlinear techniques for automatic scaling of discretized control problems. <b>2014</b> , 42, 213-216  | 11 |
| 1261 | On solving optimal control problems with higher index differential-algebraic equations. <b>2014</b> , 29, 1139-1162   | 6  |
| 1260 | Nonlinear Medium-Term Hydro-Thermal Scheduling With Transmission Constraints. <b>2014</b> , 29, 1623-1633   | 26 |
| 1259 | Simulated moving bed chromatography designs for lanthanide and actinide separations using Reillex HPQ <sup>®</sup> resin. <b>2014</b> , 136, 50-57  | 5  |
| 1258 | On multi-objective economic predictive control for cyclic process operation. <b>2014</b> , 24, 1328-1336  | 13 |
| 1257 | Optimization of reactive simulated moving bed systems with modulation of feed concentration for production of glycol ether ester. <b>2014</b> , 1360, 196-208                             | 17 |
| 1256 | . <b>2014</b> , 63, 304-316   | 25 |
| 1255 | Multi-column chromatographic process development using simulated moving bed superstructure and simultaneous optimization $\square$ Model correction framework. <b>2014</b> , 116, 428-441 | 24 |
| 1254 | Optimal control of eutrophication processes in a moving domain. <b>2014</b> , 351, 4142-4182  | 8  |

|      |  |     |
|------|--|-----|
| 1253 | Economic model predictive control of parabolic PDE systems: Addressing state estimation and computational efficiency. <b>2014</b> , 24, 448-462  | 22  |
| 1252 | Multi-scale optimization for process systems engineering. <b>2014</b> , 60, 17-30  | 82  |
| 1251 | Low-thrust trajectory design with constrained particle swarm optimization. <b>2014</b> , 36, 114-124   | 24  |
| 1250 | Impact of grafting on the design of new membrane adsorbers for adenovirus purification. <b>2014</b> , 181, 1-11  | 16  |
| 1249 | Dynamic parameter estimation of atomic layer deposition kinetics applied to in situ quartz crystal microbalance diagnostics. <b>2014</b> , 111, 15-33  | 14  |
| 1248 | Efficient chemical equilibrium calculations for geochemical speciation and reactive transport modelling. <b>2014</b> , 131, 301-322  | 46  |
| 1247 | Some Efficient Optimization Methods for Solving the Security-Constrained Optimal Power Flow Problem. <b>2014</b> , 29, 863-872   | 56  |
| 1246 | Weighted Triangulations for Geometry Processing. <b>2014</b> , 33, 1-13  | 23  |
| 1245 | Optimization of Fractional Order Dynamic Chemical Processing Systems. <b>2014</b> , 53, 5110-5127  | 39  |
| 1244 | Learning surrogate models for simulation-based optimization. <b>2014</b> , 60, 2211-2227   | 210 |
| 1243 | Getting the most out of it: Optimal experiments for parameter estimation of microalgae growth models. <b>2014</b> , 24, 991-1001   | 23  |
| 1242 | Feed-rate and trajectory optimization for CNC machine tools. <b>2014</b> , 30, 667-677   | 26  |
| 1241 | A Centralized Energy Management System for Isolated Microgrids. <b>2014</b> , 5, 1864-1875   | 403 |
| 1240 | Nonlinear Production Planning of Oil-Refinery Units for the Future Fuel Market in Brazil: Process Design Scenario-Based Model. <b>2014</b> , 53, 4352-4365   | 14  |
| 1239 | Multi-objective optimisation of positively homogeneous functions and an application in radiation therapy. <b>2014</b> , 42, 268-272  | 10  |
| 1238 | Iso-level tool path planning for free-form surfaces. <b>2014</b> , 53, 117-125   | 35  |
| 1237 | A maximum-likelihood method for estimating parameters, stochastic disturbance intensities and measurement noise variances in nonlinear dynamic models with process disturbances. <b>2014</b> , 67, 178-198 | 15  |
| 1236 | Handling uncertainty in economic nonlinear model predictive control: A comparative case study. <b>2014</b> , 24, 1247-1259   | 112 |



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|------|--|----|
| 1235 | A comprehensive atomistic analysis of the experimental dynamic-mechanical response of a metallic glass. <b>2014</b> , 74, 183-188                      | 41 |
| 1234 | Limit state of structures made of heterogeneous materials. <b>2014</b> , 63, 124-137   | 19 |
| 1233 | Economic Model Predictive Control of Transport-Reaction Processes. <b>2014</b> , 53, 7382-7396   | 31 |
| 1232 | A Hierarchical Model-based Predictive Control Strategy for Building Heating Systems. <b>2014</b> ,   | 3  |
| 1231 | Joint design of stochastically safe setpoints and controllers for nonlinear constrained systems by means of optimization. <b>2014</b> , 47, 1637-1642  | 1  |
| 1230 | Optimal Operation of Solar Tower Plants with Thermal Storage for System Design. <b>2014</b> , 47, 4972-4978  | 9  |
| 1229 | Range Safety Assessment Tool (RSAT): An analysis environment for safety assessment of launch and reentry vehicles. <b>2014</b> ,                       | 4  |
| 1228 | Chapter 10 Algebraic Modeling and Optimization. <b>2014</b> , 469-494  |    |
| 1227 | Advanced Solution Strategies for r-Adaptive Finite Element Analysis. <b>2014</b> , 14, 257-258   |    |
| 1226 | Discrete mechanics and mixed integer optimal control of dynamical systems. <b>2014</b> , 14, 919-920   | 4  |
| 1225 | Confirmation of a Nonlinear Model Predictive Control Strategy Applied to a Permanent Magnet Linear Generator for Wave-Energy Conversion. <b>2014</b> , | 3  |
| 1224 | Nonlinear moving horizon predictive control of ground vehicles. <b>2014</b> ,  | 0  |
| 1223 | Efficient Robust Economic Nonlinear Model Predictive Control of an Industrial Batch Reactor. <b>2014</b> , 47, 11093-11098                             | 10 |
| 1222 | Airborne Wind Energy: Airfoil-Airmass Interaction. <b>2014</b> , 47, 5814-5819   | 9  |
| 1221 | Parameter Set Selection for Signal Transduction Pathway Models including Uncertainties. <b>2014</b> , 47, 815-820                                      | 2  |
| 1220 | Optimal Tube Following for Robotic Manipulators. <b>2014</b> , 47, 305-310   | 1  |
| 1219 | Internal-growth Strategies for Dynamic Process Optimization with Differential-algebraic Equations. <b>2014</b> , 47, 7629-7634                         |    |
| 1218 | Model predictive control: a passive scheme. <b>2014</b> , 47, 1017-1022  | 4  |

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|------|--|----|
| 1217 | Robust Nonlinear Model Predictive Control with Reduction of Uncertainty via Robust Optimal Experiment Design. <b>2014</b> , 47, 1904-1909              | 16 |
| 1216 | Interactive Multiobjective Optimization for a Grab-Shift Unloader Crane. <b>2014</b> , 47, 191-197   | 1  |
| 1215 | Coal Oxycombustion Power Plant Optimization Using First Principles and Surrogate Boiler Models. <b>2014</b> , 63, 352-361                              | 8  |
| 1214 | Grasp stability analysis for elastic fingertips by using potential energy. <b>2014</b> ,   | 2  |
| 1213 | Towards Lane-Keeping Electronic Stability Control for Road-Vehicles. <b>2014</b> , 47, 6319-6325   | 2  |
| 1212 | Economic model predictive control of parabolic PDE systems: Handling state constraints by adaptive proper orthogonal decomposition. <b>2014</b> ,      |    |
| 1211 | . <b>2014</b> ,  | 21 |
| 1210 | Optimization Algorithm for Systems Governed by Chaotic Dynamics. <b>2014</b> ,   |    |
| 1209 | Partial Derivatives of the Lambert Problem. <b>2014</b> ,  | 1  |
| 1208 | Adaptive Multi-stage Output Feedback NMPC using the Extended Kalman Filter for time varying uncertainties applied to a CSTR. <b>2015</b> , 48, 242-247 | 2  |
| 1207 | Improved Design of Nonlinear Model Predictive Controllers. <b>2015</b> , 48, 254-259   | 7  |
| 1206 | Distributed Economic Model Predictive Control of a Catalytic Reactor: Evaluation of Sequential and Iterative Architectures. <b>2015</b> , 48, 26-31    | 5  |
| 1205 | Nonlinear Model Predictive Control for Cold Start Selective Catalytic Reduction. <b>2015</b> , 48, 471-476   | 5  |
| 1204 | Potential and Limitations of Multi-stage Nonlinear Model Predictive Control. <b>2015</b> , 48, 1015-1020   | 4  |
| 1203 | A Bayesian Method for Estimating Parameters in Stochastic Differential. <b>2015</b> , 48, 147-152  | 2  |
| 1202 | Numerical Solution of an Optimal Control Problem in Cancer Treatment: Combined Radio and Anti-Angiogenic Therapy. <b>2015</b> , 48, 665-666            | 1  |
| 1201 | Zone Model Predictive Control and Moving Horizon Estimation for the Regulation of Blood Glucose in Critical Care Patients. <b>2015</b> , 48, 1002-1007 | 2  |
| 1200 | An ARX-based technique for steady-state identification of chemical processes. <b>2015</b> ,  | 1  |

|      |   |    |
|------|---|----|
| 1199 | Form-Finding of Interlaced Space Structures Using Constrained Nonlinear Optimization. <b>2015</b> , 30, 273-285   | 3  |
| 1198 | Fault Tolerant Control Using Gaussian Processes and Model Predictive Control. <b>2015</b> , 25, 133-148   | 17 |
| 1197 | Offset-free MPC explained: novelties, subtleties, and applications. <b>2015</b> , 48, 342-351   | 47 |
| 1196 | Optimization of Path-Constrained Systems using Pseudospectral Methods applied to Aircraft Trajectory Planning**This work has been partially supported by project Stochastic Optimal Control Towards Enhanced Predictability of Four-Dimensional Trajectories Using Weather Ensemble Prediction Forecasts Founding Entity: Eurocontrol through HALAT Research Network (SESAR-WPe, 7th FP). Reference number: 10.22034/62.2015.48.102.197 | 2  |
| 1195 | Time-optimal trajectory planning in CNC machining including vibrational behaviour. <b>2015</b> ,  |    |
| 1194 | Supervised Remote Robot with Guided Autonomy and Teleoperation (SURROGATE): A framework for whole-body manipulation. <b>2015</b> ,  | 12 |
| 1193 | . <b>2015</b> ,   | 12 |
| 1192 | Silicon central pattern generators for cardiac diseases. <b>2015</b> , 593, 763-74  | 10 |
| 1191 | Nonlinear model predictive control of ultra-supercritical once through boiler-turbine unit. <b>2015</b> ,   |    |
| 1190 | Economic Multi-stage Output Feedback NMPC using the Unscented Kalman Filter. <b>2015</b> , 48, 38-43  | 9  |
| 1189 | Relaxing mixed integer optimal control problems using a time transformation. <b>2015</b> , 15, 27-30  | 1  |
| 1188 | Virtual process design on combined quasi-static and high-speed forming. <b>2015</b> , 15, 577-578   |    |
| 1187 | Optimal control for lithium-ion batteries. <b>2015</b> , 15, 617-618  |    |
| 1186 | Systematic variational method for statistical nonlinear state and parameter estimation. <b>2015</b> , 92, 052901  | 19 |
| 1185 | Performance of local optimization in single-plane fluoroscopic analysis for total knee arthroplasty. <b>2015</b> , 48, 3837-45  | 4  |
| 1184 | Reference Tracking of Depth of Anesthesia Using Optimal Control. <b>2015</b> , 356-360  |    |
| 1183 | Active Subspaces Applied to Range Safety Analysis and Optimization. <b>2015</b> ,   | 1  |
| 1182 | Application of the j-Subgradient in a Problem of Electroporation. <b>2015</b> , 1, 13-29  | 3  |

|      |  |     |
|------|--|-----|
| 1181 | Simplified Near Wellbore Reservoir Simulation To Predict the Performance of Viscous Oil Horizontal Well With Water Coning From an Active Aquifer. <b>2015,</b>                               |     |
| 1180 | Object detection using boundary representations of primitive shapes. <b>2015,</b>  | 7   |
| 1179 | Optimizing Control of a Tubular Polymerization Reactor: Comparison of Single Shooting and Full Discretization. <b>2015, 48, 556-561</b>  |     |
| 1178 | Economics-Oriented NMPC of Two-Stage-Riser Catalytic Pyrolysis Processes for Maximizing Propylene Yield. <b>2015, 48, 32-37</b>  | 1   |
| 1177 | Dual MPC for FIR Systems: Information Anticipation. <b>2015, 48, 1033-1038</b>   | 0   |
| 1176 | Virtual Flow Metering using B-spline Surrogate Models. <b>2015, 48, 292-297</b>  | 2   |
| 1175 | Model and discretization impact on oscillatory optimal control for a diesel-electric powertrain. <b>2015, 48, 66-71</b>  |     |
| 1174 | Bipartite structure of the inactive mouse X chromosome. <b>2015, 16, 152</b>   | 161 |
| 1173 | Model-Based Production Optimization of the Rubiales Field, Colombia. <b>2015,</b>  | 1   |
| 1172 | A distributed approach to the OPF problem. <b>2015, 2015,</b>  | 28  |
| 1171 | Full Superstructure for Multiobjective Optimization of Multicolumn Chromatography for Ternary Separations. <b>2015, 38, 1677-1682</b>  | 8   |
| 1170 | Parallel Monte Carlo Simulation of Molecular Weight Distribution and Chemical Composition Distribution for Copolymerization on a Graphics Processing Unit Platform. <b>2015, 24, 521-536</b> | 10  |
| 1169 | Real-time preventive sensor maintenance using robust moving horizon estimation and economic model predictive control. <b>2015, 61, 3374-3389</b>   | 16  |
| 1168 | Autogenerating microsecond solvers for nonlinear MPC: A tutorial using ACADO integrators. <b>2015, 36, 685-704</b>   | 78  |
| 1167 | On identification of well-conditioned nonlinear systems: Application to economic model predictive control of nonlinear processes. <b>2015, 61, 3353-3373</b>                                 | 19  |
| 1166 | Economic model predictive control of nonlinear time-delay systems: Closed-loop stability and delay compensation. <b>2015, 61, 4152-4165</b>  | 9   |
| 1165 | Shape-from-Operator: Recovering Shapes from Intrinsic Operators. <b>2015, 34, 265-274</b>  | 36  |
| 1164 | Integrated production scheduling and model predictive control of continuous processes. <b>2015, 61, 4179-4190</b>  | 44  |

|      |  |    |
|------|--|----|
| 1163 | RAPter. <b>2015</b> , 34, 1-12   | 78 |
| 1162 | Dynamic Multi-Objective Optimization of Batch Chromatographic Separation Processes. <b>2015</b> , 37, 815-820                                    | 4  |
| 1161 | Assortment Optimization under Consider-then-Rank Choice Models. <b>2015</b> ,  | 15 |
| 1160 | A Novel ARX-Based Approach for the Steady-State Identification Analysis of Industrial Depropanizer Column Datasets. <b>2015</b> , 3, 257-285     | 2  |
| 1159 | Dynamic Optimization in JModelica.org. <b>2015</b> , 3, 471-496  | 12 |
| 1158 | Multi-Period Dynamic Optimization for Large-Scale Differential-Algebraic Process Models under Uncertainty. <b>2015</b> , 3, 541-567              | 1  |
| 1157 | Methods and Tools for Robust Optimal Control of Batch Chromatographic Separation Processes. <b>2015</b> , 3, 568-606                             | 11 |
| 1156 | Hybrid Dynamic Optimization Methods for Systems Biology with Efficient Sensitivities. <b>2015</b> , 3, 701-729                                   | 8  |
| 1155 | Velocity Control for Coning Motion Missile System Using Direct Discretization Method. <b>2015</b> , 2015, 1-10                                   | 2  |
| 1154 | Mammalian cell culture process for monoclonal antibody production: nonlinear modelling and parameter estimation. <b>2015</b> , 2015, 598721      | 16 |
| 1153 | Embedded Optimal Control of Robot Manipulators with Passive Joints. <b>2015</b> , 2015, 1-21   | 2  |
| 1152 | Reduced model trust region methods for embedding complex simulations in optimization problems. <b>2015</b> , 37, 773-778                         | 2  |
| 1151 | Wind-optimal cruise trajectories using pseudospectral methods and ensemble probabilistic forecasts. <b>2015</b> ,                                | 0  |
| 1150 | Validation of nominations in gas network optimization: models, methods, and solutions. <b>2015</b> , 30, 15-53                                   | 63 |
| 1149 | Sigma: strain-level inference of genomes from metagenomic analysis for biosurveillance. <b>2015</b> , 31, 170-7                                  | 68 |
| 1148 | On The Use of Conformal Maps for the Acceleration of Convergence of the Trapezoidal Rule and Sinc Numerical Methods. <b>2015</b> , 37, A676-A700 | 6  |
| 1147 | Design of CSP plants with optimally operated thermal storage. <b>2015</b> , 116, 371-387   | 48 |
| 1146 | Initialization strategies for optimization of dynamic systems. <b>2015</b> , 78, 39-50   | 37 |

|      |   |    |
|------|---|----|
| 1145 | Optimal Operation Strategy for Biohydrogen Production. <b>2015</b> , 54, 6334-6343  | 22 |
| 1144 | Simultaneous dynamic optimization: A trajectory planning method for nonholonomic car-like robots. <b>2015</b> , 87, 30-42   | 34 |
| 1143 | Robust voltage regulation in unbalanced radial distribution system under uncertainty of distributed generation and loads. <b>2015</b> , 73, 516-527   | 11 |
| 1142 | Transport of Water versus Transport over Water. <b>2015</b> ,   | 5  |
| 1141 | Automated driving: The role of forecasts and uncertaintyA control perspective. <b>2015</b> , 24, 14-32  | 97 |
| 1140 | Benchmarking optimization solvers for structural topology optimization. <b>2015</b> , 52, 527-547   | 59 |
| 1139 | Design of a web-based application of the coupled multi-agent system model and environmental model for watershed management analysis using Hadoop. <b>2015</b> , 70, 149-162   | 28 |
| 1138 | An interactive decision-support system for multi-objective optimization of nonlinear dynamic processes with uncertainty. <b>2015</b> , 42, 7710-7731  | 40 |
| 1137 | Optimal distribution systems reconfiguration for radial and meshed grids. <b>2015</b> , 72, 136-143   | 26 |
| 1136 | Advances in sensitivity-based nonlinear model predictive control and dynamic real-time optimization. <b>2015</b> , 30, 104-116  | 55 |
| 1135 | Coil Design for Magnetic Particle Imaging: Application for a Preclinical Scanner. <b>2015</b> , 51, 1-8   | 7  |
| 1134 | Bioprocess modelling of biohydrogen production by <i>Rhodospseudomonas palustris</i> : Model development and effects of operating conditions on hydrogen yield and glycerol conversion efficiency. <b>2015</b> , 130, 68-78 | 36 |
| 1133 | Improving scenario decomposition algorithms for robust nonlinear model predictive control. <b>2015</b> , 79, 30-45  | 31 |
| 1132 | Conceptual design and optimization of chemical processes under uncertainty by two-stage programming. <b>2015</b> , 81, 200-217  | 33 |
| 1131 | On the Statistical Determination of Yield Strength, Ultimate Strength, and Endurance Limit of a Particle Reinforced Metal Matrix Composite (PRMMC). <b>2015</b> , 105-122   | 2  |
| 1130 | The open real-time control (RTC)-Tools software framework for modeling RTC in water resources sytems. <b>2015</b> , 17, 130-148   | 20 |
| 1129 | Dynamic parametric sensitivity optimization using simultaneous discretization in JModelica.org. <b>2015</b> ,   |    |
| 1128 | Combined workspace monitoring and collision avoidance for mobile manipulators. <b>2015</b> ,  | 1  |

|      |   |    |
|------|---|----|
| 1127 | Bayes Risk Reduction of Estimators Using Artificial Observation Noise. <b>2015</b> , 63, 5535-5545  | 14 |
| 1126 | Accounting for the control actuator layer in economic model predictive control of nonlinear processes. <b>2015</b> ,  | 0  |
| 1125 | Nonlinear programming strategies on high-performance computers. <b>2015</b> ,   | 11 |
| 1124 | . <b>2015</b> ,   | 7  |
| 1123 | Distributed optimization for shared state systems: Applications to decentralized freeway control via subnetwork splitting. <b>2015</b> ,  |    |
| 1122 | Jerk bounded velocity planner for the online management of autonomous vehicles. <b>2015</b> ,   | 3  |
| 1121 | Optimal load shedding in distributed networks with sigmoid cost functions. <b>2015</b> ,  | 5  |
| 1120 | Grasp stability evaluation based on energy tolerance in potential field. <b>2015</b> ,  | 1  |
| 1119 | Autonomous parking: A unified motion planning framework based on simultaneous dynamic optimization. <b>2015</b> ,   | 1  |
| 1118 | Real-time approximate explicit nonlinear model predictive control for the swing-up of a reaction wheel pendulum. <b>2015</b> ,  | 1  |
| 1117 | Adaptive barrier filter-line-search interior point method for optimal power flow with FACTS devices. <b>2015</b> , 9, 2792-2798   | 16 |
| 1116 | Optimal power flows with voltage stability constraint based on voltage stability indices and artificial neural networks. <b>2015</b> ,  | 1  |
| 1115 | Monitoring an Advection-Diffusion Process Using Aerial Mobile Sensors. <b>2015</b> , 03, 221-238  | 9  |
| 1114 | A mathematical model for understanding the spread of nipah fever epidemic in Bangladesh. <b>2015</b> ,  | 4  |
| 1113 | Generalization of optimal motion trajectories for bipedal walking. <b>2015</b> ,  | 9  |
| 1112 | Hybrid quadratic programming and compact formulation method for economic dispatch with prohibited operating zones and network losses. <b>2015</b> ,   | 1  |
| 1111 | Elasticity of 3D networks with rigid filaments and compliant crosslinks. <b>2015</b> , 11, 343-54   | 23 |
| 1110 | Trajectory Bounds of Input-to-State Stability for Nonlinear Model Predictive Control**This material is based upon work supported by the National Science Foundation Graduate Research Fellowship Program Grant No. DGE1252522. The first author would also like to thank the Pittsburgh chapter of the ARCS Foundation and the Choctaw Nation of Oklahoma for generous support. <b>2015</b> , 48, 1027-1032 |    |

|      |  |    |
|------|--|----|
| 1109 | An Active-Set Method for Second-Order Conic-Constrained Quadratic Programming. <b>2015</b> , 25, 1455-1477   | 4  |
| 1108 | An optimal control approach to reference level tracking in general anesthesia. <b>2015</b> ,   | 0  |
| 1107 | Extraction of the Quad Layout of a Triangle Mesh Guided by Its Curve Skeleton. <b>2015</b> , 35, 1-13  | 30 |
| 1106 | Optimizing robot trajectories for automatic robot code generation. <b>2015</b> ,   | 4  |
| 1105 | Energy optimization of multi-robot systems. <b>2015</b> ,  | 21 |
| 1104 | Real-Time NMPC for Semi-Automated Highway Driving of Long Heavy Vehicle Combinations. <b>2015</b> , 48, 39-46  | 2  |
| 1103 | Back Matter. <b>2015</b> , 279-294   |    |
| 1102 | Supervised Learning via Optimal Control Labeling for Criticality Classification in Vehicle Active Safety. <b>2015</b> ,  | 2  |
| 1101 | Parameter Identification of the Droop Model using Optimal Experiment Design. <b>2015</b> , 48, 586-591   | 3  |
| 1100 | Nonlinear Programming Properties for Stable and Robust NMPC. <b>2015</b> , 48, 388-397   | 15 |
| 1099 | Shipboard power management using constrained nonlinear model predictive control. <b>2015</b> ,   | 11 |
| 1098 | Non-linear model predictive control for guidance of a fixed-wing UAV in precision deep stall landing. <b>2015</b> ,  | 10 |
| 1097 | Algorithmic Aspects of Isogeometric Shape Optimization. <b>2015</b> , 183-207  |    |
| 1096 | Hierarchical predictive control for ground-vehicle maneuvering. <b>2015</b> ,  | 5  |
| 1095 | Monitoring Moving Objects Using Aerial Mobile Sensors. <b>2015</b> , 1-1   | 11 |
| 1094 | Scenario Based Implicit Dual Model Predictive Control. <b>2015</b> , 48, 416-421   | 7  |
| 1093 | Medially constrained deformable modeling for segmentation of branching medial structures: Application to aortic valve segmentation and morphometry. <b>2015</b> , 26, 217-31 | 21 |
| 1092 | Predictive control of a Smart Grid: A distributed optimization algorithm with centralized performance properties. <b>2015</b> ,  | 3  |



|      |  |     |
|------|--|-----|
| 1091 | Optimal Campaign Continuous Manufacturing. <b>2015</b> , 54, 11344-11359   | 25  |
| 1090 | Online regeneration of bipedal walking gait pattern optimizing footstep placement and timing. <b>2015</b> ,  | 30  |
| 1089 | Cartesian nonlinear model predictive control of redundant manipulators considering obstacles. <b>2015</b> ,  | 11  |
| 1088 | Robust output feedback NMPC with guaranteed constraint satisfaction. <b>2015</b> , 48, 326-331   |     |
| 1087 | A framework for modeling and optimal control of automatic transmission systems. <b>2015</b> , 48, 285-291  | 9   |
| 1086 | Handling structural plant-model mismatch via multi-stage nonlinear model predictive control. <b>2015</b> ,   | 5   |
| 1085 | An NLP penalty-based strategy for handling discrete controls for Volt/Var optimization in distribution systems. <b>2015</b> ,  | 1   |
| 1084 | Optimal Low Temperature Charging of Lithium-ion Batteries. <b>2015</b> , 48, 1216-1221   | 7   |
| 1083 | Time-optimal trajectory planning for tractor-trailer vehicles via simultaneous dynamic optimization. <b>2015</b> ,   | 9   |
| 1082 | Adjoint-Based Optimization on a Network of Discretized Scalar Conservation Laws with Applications to Coordinated Ramp Metering. <b>2015</b> , 167, 733-760                     | 25  |
| 1081 | Simulation and experimental demonstration of model predictive control in a building HVAC system. <b>2015</b> , 21, 721-732   | 17  |
| 1080 | Scalable, reconfigurable Model Predictive Control for building heating systems. <b>2015</b> ,  | 3   |
| 1079 | Stochastic Nonlinear Model Predictive Control of an Uncertain Batch Polymerization Reactor. <b>2015</b> , 48, 540-545  | 7   |
| 1078 | An Analytical Hessian and Parallel-Computing Approach for Efficient Dynamic Optimization Based on Control-Variable Correlation Analysis. <b>2015</b> , 54, 12086-12095         | 14  |
| 1077 | Cyber Physical Systems Approach to Smart Electric Power Grid. <b>2015</b> ,  | 16  |
| 1076 | Large-scale Multi-material Topology Optimization for Additive Manufacturing. <b>2015</b> ,   | 11  |
| 1075 | Adjustable Robust Real-Time Power Dispatch With Large-Scale Wind Power Integration. <b>2015</b> , 6, 357-368   | 121 |
| 1074 | Adjoint based optimal control of partially miscible two-phase flow in porous media with applications to CO2 sequestration in underground reservoirs. <b>2015</b> , 16, 103-130 | 4   |

|      |   |    |
|------|---|----|
| 1073 | On Soft Power Diagrams. <b>2015</b> , 14, 173-196   | 3  |
| 1072 | Optimality properties of an Augmented Lagrangian method on infeasible problems. <b>2015</b> , 60, 609-631   | 11 |
| 1071 | Statistical Atlases and Computational Models of the Heart - Imaging and Modelling Challenges. <b>2015</b> ,   | 2  |
| 1070 | Optimal operations for large-scale seawater reverse osmosis networks. <b>2015</b> , 476, 508-524  | 17 |
| 1069 | . <b>2015</b> , 30, 2278-2287   | 51 |
| 1068 | Economic model predictive control of nonlinear process systems using empirical models. <b>2015</b> , 61, 816-830  | 41 |
| 1067 | Optimal solar sail transfers between Halo orbits of different Sun-planet systems. <b>2015</b> , 55, 1405-1421   | 12 |
| 1066 | A Computationally Efficient FPTAS for Convex Stochastic Dynamic Programs. <b>2015</b> , 25, 317-350   | 7  |
| 1065 | Finite-Horizon Parameterizing Manifolds, and Applications to Suboptimal Control of Nonlinear Parabolic PDEs. <b>2015</b> , 135, 81-144  | 6  |
| 1064 | Real-time economic model predictive control of nonlinear process systems. <b>2015</b> , 61, 555-571   | 17 |
| 1063 | On computing task-oriented grasps. <b>2015</b> , 66, 145-158  | 5  |
| 1062 | Optimization during the process synthesis: enabling the oxidative coupling of methane by minimizing the energy required for the carbon dioxide removal. <b>2015</b> , 91, 100-108 | 7  |
| 1061 | An optimization-based approach to extract faceted crystal shapes from stereoscopic images. <b>2015</b> , 75, 171-183  | 16 |
| 1060 | . <b>2015</b> , 6, 351-359  | 7  |
| 1059 | Multiphase Optimal Control Framework for Commercial Aircraft Four-Dimensional Flight-Planning Problems. <b>2015</b> , 52, 274-286   | 26 |
| 1058 | A New Starting Point Strategy for Shakedown Analysis. <b>2015</b> , 123-141   |    |
| 1057 | Linear-quadratic control problems with L1-control cost. <b>2015</b> , 36, 512-534   | 19 |
| 1056 | Assessing the reliability of general-purpose Inexact Restoration methods. <b>2015</b> , 282, 1-16   | 10 |

|      |  |     |
|------|--|-----|
| 1055 | Joint Allocation of Resource Blocks, Power, and Energy-Harvesting Relays in Cellular Networks. <b>2015</b> , 33, 482-495   | 29  |
| 1054 | A differentiable reformulation for E-optimal design of experiments in nonlinear dynamic biosystems. <b>2015</b> , 264, 1-7   | 5   |
| 1053 | Using horizon estimation and nonlinear optimization for grey-box identification. <b>2015</b> , 30, 69-79   | 6   |
| 1052 | A line search filter inexact reduced Hessian method for nonlinear equality constrained optimization. <b>2015</b> , 48, 365-380   |     |
| 1051 | Optimal Shape and Location of Sensors for Parabolic Equations with Random Initial Data. <b>2015</b> , 216, 921-981   | 38  |
| 1050 | A primal heuristic for optimizing the topology of gas networks based on dual information. <b>2015</b> , 3, 53-78   | 4   |
| 1049 | Is my model good enough? Best practices for verification and validation of musculoskeletal models and simulations of movement. <b>2015</b> , 137, 020905               | 288 |
| 1048 | Analysis and optimal control for free melt flow boundaries in laser cutting with distributed radiation. <b>2015</b> , 95, 297-316                                      | 12  |
| 1047 | A parallel algorithm for optimizing the capital structure contingent on maximum value at risk. <b>2015</b> , 44, 384-405   | 2   |
| 1046 | The Price of Inexactness: Convergence Properties of Relaxation Methods for Mathematical Programs with Complementarity Constraints Revisited. <b>2015</b> , 40, 253-275 | 22  |
| 1045 | Design of adaptive transonic laminar airfoils using the E- $\epsilon$ transition model. <b>2015</b> , 46, 60-71  | 19  |
| 1044 | Data-driven finite elements for geometry and material design. <b>2015</b> , 34, 1-10   | 31  |
| 1043 | Degeneracy Hunter: An Algorithm for Determining Irreducible Sets of Degenerate Constraints in Mathematical Programs. <b>2015</b> , 809-814                             | 3   |
| 1042 | First and second order derivatives for optimizing parallel RF excitation waveforms. <b>2015</b> , 258, 65-80   | 7   |
| 1041 | A unified motion planning method for parking an autonomous vehicle in the presence of irregularly placed obstacles. <b>2015</b> , 86, 11-20                            | 78  |
| 1040 | Optimal profiles for one dimensional slider bearings under technological constraints. <b>2015</b> , 90, 198-216  | 7   |
| 1039 | A four-pole power-combiner design for far-infrared and submillimeter spectroscopy. <b>2015</b> , 114, 54-59  | 3   |
| 1038 | Automatic penalty continuation in structural topology optimization. <b>2015</b> , 52, 1205-1221  | 23  |

|      |   |    |
|------|---|----|
| 1037 | Some efficient approaches for multi-objective constrained optimization of computationally expensive black-box model problems. <b>2015</b> , 82, 228-239 | 14 |
| 1036 | Energy and cost estimates for capturing CO2 from a dry flue gas using pressure/vacuum swing adsorption. <b>2015</b> , 102, 354-367                      | 50 |
| 1035 | Worst-case topology optimization of self-weight loaded structures using semi-definite programming. <b>2015</b> , 52, 915-928                            | 22 |
| 1034 | BendFields. <b>2015</b> , 34, 1-16  | 33 |
| 1033 | Computing Optimal Heat Release Rates in Combustion Engines. <b>2015</b> , 8, 1069-1079  | 11 |
| 1032 | Smooth bijective maps between arbitrary planar polygons. <b>2015</b> , 35-36, 243-254   | 11 |
| 1031 | Approximate robust optimization of nonlinear systems under parametric uncertainty and process noise. <b>2015</b> , 33, 140-154                          | 39 |
| 1030 | Multi-criteria optimization of test rig loading programs in fatigue life determination. <b>2015</b> , 101, 16-23  | 2  |
| 1029 | Transmission system restoration with co-optimization of repairs, load pickups, and generation dispatch. <b>2015</b> , 72, 144-154                       | 34 |
| 1028 | Handling state constraints and economics in feedback control of transport-reaction processes. <b>2015</b> , 32, 98-108                                  | 9  |
| 1027 | Higher-order Discrete Adjoint ODE Solver in C++ for Dynamic Optimization. <b>2015</b> , 51, 256-265   | 4  |
| 1026 | Optimal design of Neuro-Mechanical Oscillators with stability constraints. <b>2015</b> , 95, 620-637  |    |
| 1025 | A tractable approximation of non-convex chance constrained optimization with non-Gaussian uncertainties. <b>2015</b> , 47, 495-520                      | 25 |
| 1024 | Simulation of superconducting tapes and coils with convex quadratic programming method. <b>2015</b> , 28, 085002  | 2  |
| 1023 | Improving 3D Genome Reconstructions Using Orthologous and Functional Constraints. <b>2015</b> , 11, e1004298  | 9  |
| 1022 | A decomposition method for network-constrained unit commitment with AC power flow constraints. <b>2015</b> , 88, 595-603                                | 33 |
| 1021 | Fast engineering optimization: A novel highly effective control parameterization approach for industrial dynamic processes. <b>2015</b> , 58, 248-54    | 16 |
| 1020 | Inverse Dynamics of Multilink Cable-Driven Manipulators With the Consideration of Joint Interaction Forces and Moments. <b>2015</b> , 31, 479-488       | 29 |

|      |  |     |    |
|------|--|-----|----|
| 1019 | Plant-level dynamic optimization of Cryogenic Carbon Capture with conventional and renewable power sources. <b>2015</b> , 149, 354-366                               |     | 56 |
| 1018 | Strategies for adaptive optimization with aggregation constraints using interior-point methods. <b>2015</b> , 153, 217-229   |     | 19 |
| 1017 | Transmission system repair and restoration. <i>Mathematical Programming</i> , <b>2015</b> , 151, 347-373   | 2.1 | 28 |
| 1016 | Augmented Lagrangian methods for nonlinear programming with possible infeasibility. <b>2015</b> , 63, 297-318  |     | 5  |
| 1015 | Robust design of adenovirus purification by two-column, simulated moving-bed, size-exclusion chromatography. <b>2015</b> , 213, 109-19                               |     | 27 |
| 1014 | Low complexity predistortion and equalization in nonlinear multicarrier satellite communications. <b>2015</b> , 2015,  |     | 8  |
| 1013 | Optimal footfall patterns for cost minimization in running. <b>2015</b> , 48, 2858-64  |     | 27 |
| 1012 | Watermarking spot colors in packaging. <b>2015</b> ,   |     | 1  |
| 1011 | PCA model building with missing data: New proposals and a comparative study. <b>2015</b> , 146, 77-88  |     | 52 |
| 1010 | Convex reformulations for solving a nonlinear network design problem. <b>2015</b> , 62, 717-759  |     | 11 |
| 1009 | Analysis of green algal growth via dynamic model simulation and process optimization. <b>2015</b> , 112, 2025-39   |     | 22 |
| 1008 | Optimization of sub-ambient separation systems with embedded cubic equation of state thermodynamic models and complementarity constraints. <b>2015</b> , 81, 323-343 |     | 18 |
| 1007 | Fast Evaluation of Minimum Zone form Errors of Freeform NURBS Surfaces. <b>2015</b> , 27, 23-28  |     | 4  |
| 1006 | A Polynomial Optimization Approach to Principal-Agent Problems. <b>2015</b> , 83, 729-769  |     | 17 |
| 1005 | Rigorous design of distillation columns using surrogate models based on Kriging interpolation. <b>2015</b> , 61, 2169-2187   |     | 42 |
| 1004 | Finding graph embeddings by incremental low-rank semidefinite programming. <b>2015</b> , 30, 1050-1076   |     |    |
| 1003 | Analysis of the cyanobacterial hydrogen photoproduction process via model identification and process simulation. <b>2015</b> , 128, 130-146                          |     | 21 |
| 1002 | A modular approach to intensity-modulated arc therapy optimization with noncoplanar trajectories. <b>2015</b> , 60, 5179-98  |     | 31 |

|      |   |    |
|------|---|----|
| 1001 | Numerical Optimization of Current Parameters in Combined Electromagnetic-Classical Forming Processes. <b>2015</b> , 651-653, 1406-1411                                  | 4  |
| 1000 | Optimal Continuous-Thrust Responsive Theater Maneuvers. <b>2015</b> , 52, 1375-1387   | 3  |
| 999  | Solving the maximum-crossrange problem via successive second-order cone programming with a line search. <b>2015</b> , 47, 10-20   | 43 |
| 998  | Management of harmonic propagation in a marine vessel by use of optimization. <b>2015</b> ,   | 4  |
| 997  | . <b>2015</b> , 51, 1432-1446   | 16 |
| 996  | Robust Optimization of a Wing Under Structural and Material Uncertainties. <b>2015</b> ,  | 2  |
| 995  | Scalable high-dimensional dynamic stochastic economic modeling. <b>2015</b> , 11, 12-25   | 9  |
| 994  | Designing shale-well proxy models for field development and production optimization problems. <b>2015</b> , 27, 504-514   | 13 |
| 993  | Dynamic Simulation and Optimization for Arthrospira platensis Growth and C-Phycocyanin Production. <b>2015</b> , 54, 10606-10614  | 27 |
| 992  | Investigating the impact of Cryogenic Carbon Capture on power plant performance. <b>2015</b> ,  | 6  |
| 991  | Adjoint Sensitivity Analysis for Nonsmooth Differential-Algebraic Equation Systems. <b>2015</b> , 37, A2380-A2402   | 2  |
| 990  | Interactive NBI and (E)NNC methods for the progressive exploration of the criteria space in multi-objective optimization and optimal control. <b>2015</b> , 82, 186-201 | 11 |
| 989  | Non-linear model predictive control for constrained robot navigation in row crops. <b>2015</b> ,  | 7  |
| 988  | Forecasting and Predictive Control of the Dutch Canal Network. <b>2015</b> , 75-94  | 1  |
| 987  | A Distributed and Maximum-Likelihood Sensor Network Localization Algorithm Based Upon a Nonconvex Problem Formulation. <b>2015</b> , 1, 247-258                         | 24 |
| 986  | An Interior-Point ( $\ell_1$ )-Penalty Method for Nonlinear Optimization. <b>2015</b> , 117-150   | 0  |
| 985  | An interior-point method for nonlinear optimization problems with locatable and separable nonsmoothness. <b>2015</b> , 3, 309-348                                       | 7  |
| 984  | Distributed Optimization for Shared State Systems: Applications to Decentralized Freeway Control via Subnetwork Splitting. <b>2015</b> , 16, 3465-3472                  | 16 |

|     |  |    |
|-----|--|----|
| 983 | Towards dual robust nonlinear model predictive control: A multi-stage approach. <b>2015,</b>   | 8  |
| 982 | A Nonmonotone Filter SQP Method: Local Convergence and Numerical Results. <b>2015, 25, 1885-1911</b>                                       | 10 |
| 981 | Exploiting sparsity in the discrete mechanics and optimal control method with application to human motion planning. <b>2015,</b>           | 3  |
| 980 | Distributed Multi-Period Optimal Power Flow for Demand Response in Microgrids. <b>2015,</b>  | 21 |
| 979 | Fault-tolerant optimal control of a building HVAC system. <b>2015, 21, 734-751</b>   | 23 |
| 978 | Handling computational delay in economic model predictive control of nonlinear process systems. <b>2015,</b>                               |    |
| 977 | Economic model predictive control of nonlinear process systems using multiple empirical models. <b>2015,</b>                               | 2  |
| 976 | Evaluation of a direct optimization method for trajectory planning of a 9-DOF redundant fruit-picking manipulator. <b>2015,</b>            | 10 |
| 975 | Simultaneous optimization and control for polypropylene grade transition with two-layer hierarchical structure. <b>2015, 23, 2053-2064</b> |    |
| 974 | Constrained Spectrum Control. <b>2015, 60, 1969-1974</b>   | 7  |
| 973 | Balance Layout Problem for 3D-Objects: Mathematical Model and Solution Methods. <b>2015, 51, 556-565</b>                                   | 18 |
| 972 | . <b>2015, 6, 2681-2693</b>  | 99 |
| 971 | Optimal profile of heat transfer pin fins under technological constraints. <b>2015, 93, 2292-2298</b>                                      | 11 |
| 970 | Production Optimization [Facilitated by Divide and Conquer Strategies. <b>2015, 48, 1-8</b>  | 3  |
| 969 | Data-driven structural priors for shape completion. <b>2015, 34, 1-11</b>  | 63 |
| 968 | Smoothing and regularization strategies for optimization of hybrid dynamic systems. <b>2015, 16, 541-569</b>                               | 2  |
| 967 | Effect of the Electrical Energy Conversion on Optimal Cycles for Pumping Airborne Wind Energy. <b>2015, 6, 2-10</b>                        | 14 |
| 966 | Experimental study of occupancy-based control of HVAC zones. <b>2015, 140, 75-84</b>   | 70 |

|     |  |     |
|-----|--|-----|
| 965 | Discrete thickness optimization via piecewise constraint penalization. <b>2015</b> , 51, 1247-1265   | 2   |
| 964 | Economic MPC of Aggregating Commercial Buildings for Providing Flexible Power Reserve. <b>2015</b> , 30, 2685-2694   | 47  |
| 963 | An optimized simulation model for iron-based Fischer-Tropsch catalyst design: Transfer limitations as functions of operating and design conditions. <b>2015</b> , 263, 268-279 | 28  |
| 962 | Limit states of structures in n-dimensional loading spaces with limited kinematical hardening. <b>2015</b> , 147, 4-13   | 14  |
| 961 | Combined scheduling and capacity planning of electricity-based ammonia production to integrate renewable energies. <b>2015</b> , 241, 851-862                                  | 38  |
| 960 | Complex Systems Design & Management Asia. <b>2015</b> ,  |     |
| 959 | Limited-memory LDL <sup>T</sup> factorization of symmetric quasi-definite matrices with application to constrained optimization. <b>2015</b> , 70, 9-41                        | 6   |
| 958 | Model predictive control for tracking randomly varying references. <b>2015</b> , 88, 745-753   | 12  |
| 957 | Batch-to-Batch Variation: A Key Component for Modeling Chemical Manufacturing Processes. <b>2015</b> , 19, 908-914   | 19  |
| 956 | Optimal location of green zones in metropolitan areas to control the urban heat island. <b>2015</b> , 289, 412-425   | 22  |
| 955 | Stochastic Model Predictive Control for Building HVAC Systems: Complexity and Conservatism. <b>2015</b> , 23, 101-116  | 116 |
| 954 | Integrated topology and controller optimization of motion systems in the frequency domain. <b>2015</b> , 51, 673-685   | 7   |
| 953 | The turnpike property in finite-dimensional nonlinear optimal control. <b>2015</b> , 258, 81-114   | 102 |
| 952 | Global optimization of nonconvex problems with multilinear intermediates. <b>2015</b> , 7, 1-37  | 29  |
| 951 | Renewable Energies in Medium-Term Power Planning. <b>2015</b> , 30, 88-97  | 10  |
| 950 | Geometric and Numerical Methods in the Contrast Imaging Problem in Nuclear Magnetic Resonance. <b>2015</b> , 135, 5-45   | 9   |
| 949 | Optimal clustering of a pair of irregular objects. <b>2015</b> , 61, 497-524   | 26  |
| 948 | A discrete method to solve fractional optimal control problems. <b>2015</b> , 80, 1811-1816  | 55  |



|     |   |    |
|-----|---|----|
| 947 | High detail stationary optimization models for gas networks. <b>2015</b> , 16, 131-164  | 47 |
| 946 | Robust multi-objective optimal control of dynamic biological networks. <b>2016</b> , 38, 433-438  | 1  |
| 945 | A Reformulation Strategy for Deterministic Global Optimization of Ideal Multi-component Distillation Processes. <b>2016</b> , 38, 691-696                                   | 3  |
| 944 | Optimal dynamic experiment design for guaranteed parameter estimation. <b>2016</b> , 38, 757-762  |    |
| 943 | Application of the adjoint approach to optimise the initial conditions of a turbidity current. <b>2016</b> ,  |    |
| 942 | SolACE: An Open Source Package for Nonlinear Model Predictive Control and State Estimation for (Bio)Chemical Processes. <b>2016</b> , 1971-1976                             | 3  |
| 941 | Notes on Numerical Methods for Solving Optimal Control Problems. <b>2016</b> , 5, 154-166   | 38 |
| 940 | Dynamic Principal-Agent Models. <b>2016</b> ,   | 2  |
| 939 | Distributed minimum batch time optimization for batch reactors with shared resources. <b>2016</b> , 1593-1598   | 1  |
| 938 | A Novel Control Strategy of DFIG Based on the Optimization of Transfer Trajectory at Operation Points in the Islanded Power System. <b>2016</b> , 2016, 1-10                |    |
| 937 | A Sensitive Method Approach for Chromatographic Analysis of Gas Streams in Separation Processes Based on Columns Packed with an Adsorbent Material. <b>2016</b> , 2016, 1-9 | 3  |
| 936 | Calculation of Optimal Heat Release Rates under Constrained Conditions. <b>2016</b> , 9, 1143-1162  | 13 |
| 935 | Optimal Control of a Diesel-Electric Powertrain During an Up-Shift. <b>2016</b> ,   | 1  |
| 934 | A Continuous Formulation for Logical Decisions in Differential Algebraic Systems using Mathematical Programs with Complementarity Constraints. <b>2016</b> , 4, 7           | 9  |
| 933 | Real-Time Optimization under Uncertainty Applied to a Gas Lifted Well Network. <b>2016</b> , 4, 52  | 30 |
| 932 | Multiscale Metabolic Modeling of C4 Plants: Connecting Nonlinear Genome-Scale Models to Leaf-Scale Metabolism in Developing Maize Leaves. <b>2016</b> , 11, e0151722        | 28 |
| 931 | Regularization and implicit Euler discretization of linear-quadratic optimal control problems with bang-bang solutions. <b>2016</b> , 287-288, 104-124                      | 8  |
| 930 | Nested direct transcription optimization for singular optimal control problems. <b>2016</b> , 62, 3611-3627   | 20 |

|     |  |    |
|-----|--|----|
| 929 | Actuator stiction compensation via model predictive control for nonlinear processes. <b>2016</b> , 62, 2004-2023                         | 15 |
| 928 | An n-material thresholding method for improving integerness of solutions in topology optimization. <b>2016</b> , 108, 1498-1524          | 11 |
| 927 | Short-Term Hydropower Optimization and Assessment of Operational Flexibility. <b>2016</b> , 142, 04015048                                | 9  |
| 926 | A feedback control framework for safe and economically-optimal operation of nonlinear processes. <b>2016</b> , 62, 2391-2409             | 21 |
| 925 | A Two-Level Approach to AC Optimal Transmission Switching With an Accelerating Technique. <b>2016</b> , 1-1                              | 13 |
| 924 | Model Predictive Control with Output Feedback for a Deorbiting Electrodynamic Tether System. <b>2016</b> , 39, 2455-2460                 | 24 |
| 923 | Receding horizon tracking control of unicycle-type robots based on virtual structure. <b>2016</b> , 26, 3900-3918                        | 25 |
| 922 | Optimization of grade transitions in polyethylene solution polymerization processes. <b>2016</b> , 62, 1126-1142                         | 19 |
| 921 | Work those arms: Toward dynamic and stable humanoid walking that optimizes full-body motion. <b>2016</b> ,                               | 6  |
| 920 | New expression of SNR formula for CDMA system. <b>2016</b> ,   | 1  |
| 919 | Packing Unequal Spheres into Various Containers. <b>2016</b> , 52, 419-426   | 16 |
| 918 | Economic model predictive control for nonlinear processes incorporating actuator magnitude and rate of change constraints. <b>2016</b> , | 1  |
| 917 | Model predictive current reference calculation for single-phase VSCs. <b>2016</b> ,  | 1  |
| 916 | Adaptive Topology Optimization Using a Continuous Approximation of Material Distribution. <b>2016</b> ,                                  | 2  |
| 915 | Stiction compensation via model predictive control. <b>2016</b> ,  |    |
| 914 | Online distributed motion planning for multi-vehicle systems. <b>2016</b> ,  | 8  |
| 913 | Comparing data assimilation filters for parameter estimation in a neuron model. <b>2016</b> ,  |    |
| 912 | A simulated maximum likelihood method for estimation of stochastic Wiener systems. <b>2016</b> ,   | 8  |

|     |   |    |
|-----|---|----|
| 911 | Data assimilation of membrane dynamics and channel kinetics with a neuromorphic integrated circuit. <b>2016,</b>                  | 2  |
| 910 | Fuel-optimal trajectory optimization for lunar soft landing via enhanced simultaneous dynamic optimization approach. <b>2016,</b> | 2  |
| 909 | A Low-Cost Multi-failure Resilient Replication Scheme for High Data Availability in Cloud Storage. <b>2016,</b>                   | 18 |
| 908 | Fuel Consumption Optimization of Heavy-Duty Vehicles With Grade, Wind, and Traffic Information. <b>2016, 11,</b>                  | 32 |
| 907 | Fast derivatives of rigid body dynamics for control, optimization and estimation. <b>2016,</b>                                    | 9  |
| 906 | Optimizing global liver function in radiation therapy treatment planning. <b>2016, 61, 6465-84</b>                                | 7  |
| 905 | Simultaneous control of safety constraint sets and process economics using economic model predictive control. <b>2016,</b>        | 1  |
| 904 | Efficient dynamic compressor optimization in natural gas transmission systems. <b>2016,</b>                                       | 13 |
| 903 | Time transformed mixed integer optimal control problems with impacts. <b>2016, 16, 789-790</b>                                    |    |
| 902 | A quadratically convergent primal decomposition algorithm with soft coupling for nonlinear parameter estimation. <b>2016,</b>     | 1  |
| 901 | Exploiting convexity in direct Optimal Control: a sequential convex quadratic programming method. <b>2016,</b>                    | 13 |
| 900 | Multiobjective economic model predictive control of mechanical pulping processes. <b>2016,</b>                                    | 1  |
| 899 | A supply restoration method of distribution system based on Soft Open Point. <b>2016,</b>   | 12 |
| 898 | Walking of the iCub humanoid robot in different scenarios: Implementation and performance analysis. <b>2016,</b>                  | 5  |
| 897 | . <b>2016,</b>  | 6  |
| 896 | Numerical search for local (partial) differential flatness. <b>2016,</b>  | 2  |
| 895 | Efficient HZD gait generation for three-dimensional underactuated humanoid running. <b>2016,</b>                                  | 6  |
| 894 | Real-Time Production Optimization of a Production Network with ESP-Boosted Wells: A Case Study. <b>2016,</b>                      | 1  |

|     |  |   |
|-----|--|---|
| 893 | Fault Tolerant Control Design for All Wheels Independent Drive and Steering Electric Vehicle with Singular Effective Drive Wheel. <b>2016,</b>   | 3 |
| 892 | Optimal design of feeding system in steel casting by constrained optimization algorithms based on InteCAST. <b>2016,</b> 13, 375-382   | 4 |
| 891 | A game theoretic modeling framework for decentralized transmission planning. <b>2016,</b>  | 1 |
| 890 | Integrating production scheduling and process operation via economic model predictive control. <b>2016,</b>  | 1 |
| 889 | Increasing fuel thermal management system capability via objective function design. <b>2016,</b>   | 1 |
| 888 | Auxiliary signal design for failure detection with initial prior information. <b>2016,</b>   | 0 |
| 887 | Actuator effects on auxiliary signal design for failure detection. <b>2016,</b>  | 0 |
| 886 | Error-triggered on-line model identification in economic model predictive control. <b>2016,</b>  |   |
| 885 | Optimal design of dynamic experiments for guaranteed parameter estimation. <b>2016,</b>  | 3 |
| 884 | On-Line power management optimization of a hybrid electric vehicle with Non linear MPC and battery re-charge equivalent cost. <b>2016,</b>   | 2 |
| 883 | Empirical Modeling of Control Valve Layer with Application to Model Predictive Control-Based Stiction Compensation**Financial support from the National Science Foundation and the Department of Energy is gratefully acknowledged.. <b>2016,</b> 49, 41-46            | 1 |
| 882 | Handling Plant Variation via Error-Triggered On-line Model Identification: Application to Economic Model Predictive Control**Financial support from the National Science Foundation and the Department of Energy is gratefully acknowledged.. <b>2016,</b> 49, 790-795 |   |
| 881 | Evaluation of Efficiently Generating Fast Robot Trajectories Under Geometric and System Constraints**The authors are grateful to STIWA Automation GmbH for financial and technical support.. <b>2016,</b> 49, 395-402  |   |
| 880 | Numerical treatment of the optimal energy control problem of hybrid vehicles. <b>2016,</b>   |   |
| 879 | Online optimal gait generation for bipedal walking robots using legendre pseudospectral optimization. <b>2016,</b>   | 8 |
| 878 | Optimal control problems for path planing of AUV using simplified models. <b>2016,</b>   | 2 |
| 877 | Optimal control for minimizing power consumption during holding patterns for airborne wind energy pumping system. <b>2016,</b>   | 6 |
| 876 | Downscaling of Airborne Wind Energy Systems. <b>2016,</b> 753, 102002  | 1 |

|     |   |     |
|-----|---|-----|
| 875 | Interchangeable components for hands-on assembly based modelling. <b>2016</b> , 35, 1-14  | 7   |
| 874 | Dynamic optimisation of price arbitrage techniques. <b>2016</b> ,   |     |
| 873 | Nonlinear object-oriented modeling based optimal control of the heart: Performing precise preload manipulation maneuvers using a ventricular assist device. <b>2016</b> , | 3   |
| 872 | On the power optimization of the vibration-based energy harvesters under swept input acceleration. <b>2016</b> ,  | 1   |
| 871 | Model predictive control of large-scale urban networks via perimeter control and route guidance actuation. <b>2016</b> ,  | 4   |
| 870 | . <b>2016</b> ,   | 8   |
| 869 | Optimal Scheduling of Vaccination Campaigns Using a Direct Dynamic Optimization Method. <b>2016</b> , 49, 207-212   | 2   |
| 868 | Optimal control of switching times in switched linear systems. <b>2016</b> ,  | 5   |
| 867 | Simulation-Based Optimization Methods Applied to Large Scale Water Systems Control. <b>2016</b> ,   | 3   |
| 866 | Designing Complex Interplanetary Trajectories for the Global Trajectory Optimization Competitions. <b>2016</b> , 151-176  | 15  |
| 865 | Evaluation of Direct Collocation Optimal Control Problem Formulations for Solving the Muscle Redundancy Problem. <b>2016</b> , 44, 2922-2936                              | 102 |
| 864 | Inversion methods for fast-ion velocity-space tomography in fusion plasmas. <b>2016</b> , 58, 045016  | 17  |
| 863 | Strong SOCP Relaxations for the Optimal Power Flow Problem. <b>2016</b> , 64, 1177-1196   | 135 |
| 862 | Solving Disjunctive Optimization Problems by Generalized Semi-infinite Optimization Techniques. <b>2016</b> , 169, 1079-1109  | 3   |
| 861 | Economic model predictive control designs for input rate-of-change constraint handling and guaranteed economic performance. <b>2016</b> , 92, 18-36                       | 20  |
| 860 | Time-Optimal Maneuver Planning in Automatic Parallel Parking Using a Simultaneous Dynamic Optimization Approach. <b>2016</b> , 17, 3263-3274                              | 63  |
| 859 | Sequential equality-constrained optimization for nonlinear programming. <b>2016</b> , 65, 699-721   | 9   |
| 858 | Dynamic optimization of a hybrid system of energy-storing cryogenic carbon capture and a baseline power generation unit. <b>2016</b> , 172, 66-79                         | 29  |

|     |   |    |
|-----|---|----|
| 857 | . <b>2016</b> , 65, 3888-3903   | 16 |
| 856 | Modellbildung und Vergleich von linearen und nichtlinearen Regelungskonzepten für Drei-Wege-Abgaskatalysatoren. <b>2016</b> , 64, 297-311         | 2  |
| 855 | Generalization of first-principles thermodynamic model: Application to hexagonal close-packed Fe <sub>3</sub> N. <b>2016</b> , 117, 83-89         | 4  |
| 854 | On the statistical determination of strength of random heterogeneous materials. <b>2016</b> , 149, 220-230  | 17 |
| 853 | Infrastructure planning for fast charging stations in a competitive market. <b>2016</b> , 68, 215-227   | 41 |
| 852 | Recovering the real-world density and liquidity premia from option data. <b>2016</b> , 16, 1147-1164  | 2  |
| 851 | Optimal power flow with storage in DC electrified railways. <b>2016</b> , 35,   | 3  |
| 850 | Model-based design and experimental validation of simulated moving bed reactor for production of glycol ether ester. <b>2016</b> , 301, 188-199   | 16 |
| 849 | Robotic Hot-Blade Cutting. <b>2016</b> , 150-164  | 18 |
| 848 | Convexity and optimization with copula-structured probabilistic constraints. <b>2016</b> , 65, 1349-1376  | 13 |
| 847 | An inertia-free filter line-search algorithm for large-scale nonlinear programming. <b>2016</b> , 64, 327-354                                     | 12 |
| 846 | Two-Step System Identification and Trajectory Tracking Control of a Small Fixed-Wing UAV. <b>2016</b> , 83, 105-131                               | 9  |
| 845 | Energy management system for enhanced resiliency of microgrids during islanded operation. <b>2016</b> , 137, 133-141                              | 81 |
| 844 | Moving horizon estimation for assimilating H-SAF remote sensing data into the HBV hydrological model. <b>2016</b> , 92, 248-257                   | 16 |
| 843 | A Decision-making Framework Based on Artificial Neural Networks and Intelligent Agents for Transmission Grid Operation. <b>2016</b> , 44, 883-893 |    |
| 842 | Towards Energy Optimization Using Trajectory Smoothing and Automatic Code Generation for Robotic Assembly. <b>2016</b> , 44, 341-346              | 7  |
| 841 | Enhancing Digital Human Motion Planning of Assembly Tasks Through Dynamics and Optimal Control. <b>2016</b> , 44, 20-25                           | 6  |
| 840 | Projection onto a Polyhedron that Exploits Sparsity. <b>2016</b> , 26, 1773-1798  | 4  |

|     |   |    |
|-----|---|----|
| 839 | Open-loop optimal control of batch chromatographic separation processes using direct collocation. <b>2016</b> , 46, 55-74   | 14 |
| 838 | An Adaptive Pseudospectral Method for Constrained Dynamic Optimization Problems in Chemical Engineering. <b>2016</b> , 39, 1884-1894  | 14 |
| 837 | Shape interior modeling and mass property optimization using ray-reps. <b>2016</b> , 58, 66-72  | 13 |
| 836 | An optimization-driven novel operation of simulated moving bed chromatographic separation. <b>2016</b> , 49, 165-170  | 2  |
| 835 | Advanced Modeling and Control of a Solid Sorbent-Based CO <sub>2</sub> Capture Process. <b>2016</b> , 49, 633-638   | 4  |
| 834 | A Set-Based Optimal Control Approach for Pharmacokinetic/Pharmacodynamic Drug Dosage Design. <b>2016</b> , 49, 797-802  | 5  |
| 833 | A two-layer structure for stabilization and optimization of an oil gathering network**We acknowledge the support of the Center for Integrated Operations at NTNU (Norway).. <b>2016</b> , 49, 931-936 | 9  |
| 832 | Spline Fluid Models for Optimization. <b>2016</b> , 49, 400-405   | 3  |
| 831 | Anticipatory Real-time Management in the Lake IJssel: Implementation and Practical Application. <b>2016</b> , 154, 49-57  | 0  |
| 830 | Comparison of Different Reservoir Models for Short Term Operation of Flood Management. <b>2016</b> , 154, 1385-1392   | 12 |
| 829 | A Method for Constrained Multiobjective Optimization Based on SQP Techniques. <b>2016</b> , 26, 2091-2119   | 34 |
| 828 | Contention-Aware Workload Placement for In-Memory Databases in Cloud Environments. <b>2016</b> , 2, 1-29  | 3  |
| 827 | A finite-element toolbox for the stationary Gross-Pitaevskii equation with rotation. <b>2016</b> , 209, 144-162   | 16 |
| 826 | A Stable and Robust NMPC Strategy with Reduced Models and Nonuniform Grids. <b>2016</b> , 49, 31-36   | 8  |
| 825 | Robust control of a supermarket refrigeration system using multi-stage NMPC. <b>2016</b> , 49, 901-906  |    |
| 824 | Optimal control of engine controlled gearshift for a diesel-electric powertrain with backlash. <b>2016</b> , 49, 762-768  | 5  |
| 823 | Obstacle avoidance via B-spline parametrizations of flat trajectories. <b>2016</b> ,  | 4  |
| 822 | Corrective Control to Handle Forecast Uncertainty: A Chance Constrained Optimal Power Flow. <b>2016</b> , 1-1   | 42 |

|     |  |    |
|-----|--|----|
| 821 | Relaxing Nonconvex Quadratic Functions by Multiple Adaptive Diagonal Perturbations. <b>2016</b> , 26, 1962-1985  | 10 |
| 820 | Time-optimal motion planning for n-DOF robot manipulators using a path-parametric system reformulation. <b>2016</b> ,  | 12 |
| 819 | A state feedback suboptimal time control method using block pulse functions. <b>2016</b> ,   | 0  |
| 818 | Trajectory optimization for lunar soft landing with a Hamiltonian-based adaptive mesh refinement strategy. <b>2016</b> , 100, 266-276  | 13 |
| 817 | Smoothed Online Resource Allocation in Multi-tier Distributed Cloud Networks. <b>2016</b> ,  | 6  |
| 816 | An estimation-forecast set-up for iceberg drift prediction. <b>2016</b> , 131, 88-107  | 6  |
| 815 | Proactive Actuator Fault-Tolerance in Economic MPC for Nonlinear Process Plants**The author gratefully acknowledge support from NFR grant 228460/030 and from Cybernetica AS.. <b>2016</b> , 49, 1097-1102 | 1  |
| 814 | Simultaneous trajectory optimization framework for lunar ascent with terrain. <b>2016</b> ,  |    |
| 813 | Joint forwarding and caching with latency awareness in information-centric networking. <b>2016</b> , 110, 133-153  | 18 |
| 812 | On closed-loop economic performance under Lyapunov-based economic model predictive control. <b>2016</b> ,  | 1  |
| 811 | Economic Equivalence of Economic Model Predictive Control and Hierarchical Control Schemes. <b>2016</b> , 55, 10978-10989  | 1  |
| 810 | Tight LP approximations for the optimal power flow problem. <b>2016</b> ,  | 8  |
| 809 | Bayesian Estimation in Stochastic Differential Equation Models via Laplace Approximation. <b>2016</b> , 49, 1109-1114  | 4  |
| 808 | A hierarchical distributed MPC for HVAC systems. <b>2016</b> ,   | 10 |
| 807 | D-RM Builder: A software tool for generating fast and accurate nonlinear dynamic reduced models from high-fidelity models. <b>2016</b> , 94, 60-74   | 7  |
| 806 | Joint contact forces can be reduced by improving joint moment symmetry in below-knee amputee gait simulations. <b>2016</b> , 49, 219-225   | 31 |
| 805 | All-hex meshing using closed-form induced polycube. <b>2016</b> , 35, 1-9  | 44 |
| 804 | An Algorithm for Tuning NMPC Controllers with Application to Chemical Processes. <b>2016</b> , 55, 9215-9228   | 9  |



|     |  |    |
|-----|--|----|
| 803 | Analyzing Vulnerability of Power Systems with Continuous Optimization Formulations. <b>2016</b> , 3, 132-146   | 36 |
| 802 | Asteroid retrieval missions enabled by invariant manifold dynamics. <b>2016</b> , 127, 667-677   | 16 |
| 801 | An approach for simultaneous estimation of reaction kinetics and curve resolution from process and spectral data. <b>2016</b> , 30, 506-522  | 13 |
| 800 | Computer-Aided Process and Plant Development. A Review of Common Software Tools and Methods and Comparison against an Integrated Collaborative Approach. <b>2016</b> , 88, 50-69   | 20 |
| 799 | Time-Optimal Path Planning for a Kinematic Car with Variable Speed. <b>2016</b> , 39, 2374-2390  | 10 |
| 798 | Autonomous Driving of a Mobile Robot Using a Combined Multiple-Shooting and Collocation Method. <b>2016</b> , 49, 193-198  | 5  |
| 797 | Towards bounded model checking using nonlinear programming solver. <b>2016</b> ,   | 2  |
| 796 | Dynamic sensing scheduling to prolong network lifetime under practical requirements. <b>2016</b> ,   | 0  |
| 795 | Parametric uncertainty propagation for robust dynamic optimization of biological networks. <b>2016</b> ,   | 2  |
| 794 | Predicting and mitigating congestion for an electric power system under load and renewable uncertainty. <b>2016</b> ,  | 0  |
| 793 | Nonlinear statistical data assimilation for HVC[Formula: see text] neurons in the avian song system. <b>2016</b> , 110, 417-434  | 14 |
| 792 | Minimum number of controls for relieving overload with nonlinear constraints. <b>2016</b> ,  |    |
| 791 | Analysis and Experimentation of Model Predictive Control for Spacecraft Rendezvous and Proximity Operations with Multiple Obstacle Avoidance. <b>2016</b> ,  | 11 |
| 790 | Convex Relaxations for Gas Expansion Planning. <b>2016</b> , 28, 645-656   | 66 |
| 789 | Model Predictive Control Strategies for Constrained Soft Landing on an Asteroid. <b>2016</b> ,   | 11 |
| 788 | Selecting control input type for a building predictive controller integrated in a power grid. <b>2016</b> ,  |    |
| 787 | Economic model predictive control of chemical processes with parameter uncertainty. <b>2016</b> , 95, 10-20  | 12 |
| 786 | Optimization Alternatives for Robust Model-based Design of Synthetic Biological Circuits**The research leading to these results has received funding from the European Union (FP7/2007-2013 under grant agreement n°604068), the Spanish Government (FEDER-CICYT DPI2011-524 28112-C01-01, DPI2014-55276-C5-1-R, DPI2015-70275-P) and the National Council of Scientific and Technologic Development of Brazil (BJT-304804/2014-2). Yadira Boada thanks also grant FPI/2013-3242 of the Universitat Politècnica de Valencia. <b>2016</b> , 49, 821-826 | 3  |

|     |  |    |
|-----|--|----|
| 785 | A Filter Active-Set Algorithm for Ball/Sphere Constrained Optimization Problem. <b>2016</b> , 26, 1429-1464  | 2  |
| 784 | Constrained Trajectory Optimization for Planetary Entry via Sequential Convex Programming. <b>2016</b> ,   | 10 |
| 783 | CofiFab. <b>2016</b> , 35, 1-11  | 55 |
| 782 | Constrained quadratic optimization for radiation treatment planning by use of graph form ADMM. <b>2016</b> ,   |    |
| 781 | Parallelization of modes of the multi-level iteration scheme for nonlinear model-predictive control of an industrial process. <b>2016</b> ,  | 7  |
| 780 | A Multiscale Strategy for Bayesian Inference Using Transport Maps. <b>2016</b> , 4, 1160-1190  | 11 |
| 779 | Online Optimal Experiment Design: Reduction of the Number of Variables**The research leading to these results has received funding from the ERC Advanced Investigator Grant MOBOCON under the grant agreement No. 291458.. <b>2016</b> , 49, 889-894 | 1  |
| 778 | Numerical Optimal Control Mixing Collocation with Single Shooting: A Case Study. <b>2016</b> , 49, 290-295   | 3  |
| 777 | Polynomial SDP cuts for Optimal Power Flow. <b>2016</b> ,  | 12 |
| 776 | Second-order shape derivatives along normal trajectories, governed by Hamilton-Jacobi equations. <b>2016</b> , 54, 1245-1266   | 5  |
| 775 | Risk Averse Stackelberg Security Games with Quantal Response. <b>2016</b> , 83-100   | 3  |
| 774 | Three-phase unbalanced voltage/VAR optimization for active distribution networks. <b>2016</b> ,  | 1  |
| 773 | A Continuously Differentiable Turbine Layout Optimization Model for Offshore Wind Farms. <b>2016</b> , 94, 497-503   | 2  |
| 772 | Network flow and copper plate relaxations for AC transmission systems. <b>2016</b> ,   | 9  |
| 771 | Abstracts accepted for American Conference on Pharmacometrics 2016 (ACoP7). <b>2016</b> , 43, 11-122   | 5  |
| 770 | Minimum time control of dynamical systems using shifted Legendre orthogonal polynomials and integration operational matrix. <b>2016</b> ,  | 1  |
| 769 | Automatic Construction of Predictive Neuron Models through Large Scale Assimilation of Electrophysiological Data. <b>2016</b> , 6, 32749   | 13 |
| 768 | Estimation of systems with oscillating inputs - applied to iceberg drift forecast. <b>2016</b> ,   | 0  |

|     |   |    |
|-----|---|----|
| 767 | An augmented Lagrangian method for optimal control of continuous time DAE systems. <b>2016,</b>   | 3  |
| 766 | Non-linear model predictive supervisory controller for building, air handling unit with recuperator and refrigeration system with heat waste recovery. <b>2016,</b> | 1  |
| 765 | Path planning maximising human comfort for assistive robots. <b>2016,</b>   | 21 |
| 764 | Periodic full circuit race line optimization under consideration of a dynamic model with gear changes. <b>2016,</b>   | 1  |
| 763 | An efficient SQP algorithm for Moving Horizon Estimation with Huber penalties and multi-rate measurements. <b>2016,</b>   | 2  |
| 762 | Steady-state optimization and nonlinear model-predictive control of a reactive distillation process using the software platform do-mpc. <b>2016,</b>                | 5  |
| 761 | Optimal sizing and placement of distributed storage in low voltage networks. <b>2016,</b>   | 34 |
| 760 | Classic Control and Modulation Schemes. <b>2016, 77-149</b>   |    |
| 759 | A fast first-order optimization approach to elastoplastic analysis of skeletal structures. <b>2016, 17, 861-896</b>   | 11 |
| 758 | Smart Connected Buildings Design Automation: Foundations and Trends. <b>2016, 10, 1-143</b>   | 11 |
| 757 | Energy and peak-power optimization of existing time-optimal robot trajectories. <b>2016,</b>  | 9  |
| 756 | Numerical aspects of large-time optimal control of Burgers equation. <b>2016, 50, 1371-1401</b>   | 11 |
| 755 | Design of an Aeroelastically Tailored 10 MW Wind Turbine Rotor. <b>2016, 753, 062008</b>  | 15 |
| 754 | Tailored parameter optimization methods for ordinary differential equation models with steady-state constraints. <b>2016, 10, 80</b>                                | 15 |
| 753 | Dynamic optimization of biological networks under parametric uncertainty. <b>2016, 10, 86</b>   | 32 |
| 752 | Convergence analysis of time-optimal model predictive control under limited computational resources. <b>2016,</b>   | 1  |
| 751 | The moving horizon estimator used in iceberg drift estimation and Forecast. <b>2016,</b>  | 0  |
| 750 | Mechanisms of regulation of the speed of evolution: The population level. <b>2016, 61, 513-520</b>  | 1  |

|     |   |     |
|-----|---|-----|
| 749 | Breadth versus depth: Interactions that stabilize particle assemblies to changes in density or temperature. <b>2016</b> , 144, 084502                                       | 15  |
| 748 | Process systems engineering perspective on the planning and development of oil fields. <b>2016</b> , 62, 2586-2604  | 28  |
| 747 | Property prediction of crystalline solids from composition and crystal structure. <b>2016</b> , 62, 2605-2613   | 11  |
| 746 | Hierarchical planning of dynamic movements without scheduled contact sequences. <b>2016</b> ,   | 19  |
| 745 | On the numerical solution of the quadratic eigenvalue complementarity problem. <b>2016</b> , 72, 721-747  | 2   |
| 744 | Generation of interior points and polyhedral representations of cones in $(\mathbb{R})^N$ cut by $(\text{vec}\{M\})$ planes sharing a common point. <b>2016</b> , 83, 71-85 |     |
| 743 | Computational optimization of gas compressor stations: MINLP models versus continuous reformulations. <b>2016</b> , 83, 409-444   | 33  |
| 742 | Modeling Close Packing of 3D Objects. <b>2016</b> , 52, 296-304   | 12  |
| 741 | Comments on direct transcription solution of DAE constrained optimal control problems with two discretization approaches. <b>2016</b> , 73, 807-838                         | 6   |
| 740 | An S(ell_1)LP-active set approach for feasibility restoration in power systems. <b>2016</b> , 17, 385-419   | 5   |
| 739 | High detail stationary optimization models for gas networks: validation and results. <b>2016</b> , 17, 437-472  | 24  |
| 738 | A Direct Method for the Langevin-Analysis of Multidimensional Stochastic Processes with Strong Correlated Measurement Noise. <b>2016</b> , 3-11                             |     |
| 737 | Broadly Accessible Self-Consistent Field Theory for Block Polymer Materials Discovery. <b>2016</b> , 49, 4675-4690  | 100 |
| 736 | Algorithmic Differentiation of Numerical Methods: Second-order Adjoint Solvers for Parameterized Systems of Nonlinear Equations. <b>2016</b> , 80, 2231-2235                | 2   |
| 735 | Are Climate Restricted Areas a Viable Interim Climate Mitigation Option over the North Atlantic?. <b>2016</b> ,   |     |
| 734 | Cost-Benefit Assessment of 2D and 3D Climate And Weather Optimized Trajectories. <b>2016</b> ,  | 5   |
| 733 | Solving optimal control problems with control delays using direct transcription. <b>2016</b> , 108, 185-203   | 12  |
| 732 | Laplacian Embedded Infinite Kernel Model for Semi-Supervised Classification. <b>2016</b> , 30, 1650022  | 2   |

|     |  |    |
|-----|--|----|
| 731 | Two-phase mixed integer programming for non-convex economic dispatch problem with spinning reserve constraints. <b>2016</b> , 140, 653-662 | 17 |
| 730 | Three-Dimensional Aircraft Conflict Resolution Based on Smoothing Methods. <b>2016</b> , 39, 1481-1490                                     | 4  |
| 729 | Collocation Methods to Minimum-Fuel Trajectory Problems with Required Time of Arrival in ATM. <b>2016</b> , 13, 243-265                    | 6  |
| 728 | Input estimation for drug discovery using optimal control and Markov chain Monte Carlo approaches. <b>2016</b> , 43, 207-21                | 7  |
| 727 | Automated structure detection for distributed process optimization. <b>2016</b> , 89, 135-148  | 4  |
| 726 | Accounting for Active Management and Risk Attitude in Forest Sector Models. <b>2016</b> , 21, 391-405                                      | 11 |
| 725 | A primal algorithm for the weighted minimum covering ball problem in $(\mathbb{R}^n)$ . <b>2016</b> , 24, 466-492                          | 2  |
| 724 | Video_5.MP4. <b>2020</b> ,   |    |
| 723 | Video_6.MP4. <b>2020</b> ,   |    |
| 722 | Video_7.MP4. <b>2020</b> ,   |    |
| 721 | Video_8.MP4. <b>2020</b> ,   |    |
| 720 | Video_1.MP4. <b>2019</b> ,   |    |
| 719 | Video_2.MP4. <b>2019</b> ,   |    |
| 718 | Going, Going, Gone: Optimising the Bidding Strategy for an Energy Storage Aggregator and its Value in Supporting Community Energy Storage. |    |
| 717 | Thinking multicriteria a jackknife when it comes to optimization. <b>2022</b> , 57-75  | 0  |
| 716 | High Accuracy Data-Based Trajectory Tracking of an Omnidirectional Mobile Robot. <b>2022</b> , 420-427                                     |    |
| 715 | Geometrically Constrained Trajectory Optimization for Multicopters. <b>2022</b> , 1-10   | 10 |
| 714 | SWIPT-based Energy Scheduling for Solar-Powered WSN in full-duplex mode. <b>2022</b> , 1-1   | 0  |

- 713 Optimality Equivalence and Computational Advantages of Free-Floating Base Dynamics Compared to Full-Body Dynamics.
- 712 Adversarial Swarm Defence Using Multiple Fixed-Wing Unmanned Aerial Vehicles. **2022**, 1-1
- 711 Modeling and optimizing dynamic networks: Applications in process engineering and energy supply. **2022**, 143-160
- 710 Don't search! Solve! Process optimization modeling with IDAES. **2022**, 33-55
- 709 A Fast Optimal Speed Planning System in Arterial Roads for Intelligent and Connected Vehicles. **2022**, 1-1 0
- 708 Technology Review for Guiding Persons in Airports and Other Hubs. **2022**, 462-473
- 707 Trajectory Optimization with Optimization-Based Dynamics. **2022**, 1-1 1
- 706 Suboptimal nonlinear moving horizon estimation. **2022**, 1-1 0
- 705 Fast, Flexible, and Exact Minimum Flow Decompositions via ILP. **2022**, 230-245 1
- 704 Adaptively robust nonlinear model predictive control based on attack identification. **2022**, 70, 367-377 0
- 703 Tight Convex Relaxations for the Expansion Planning Problem. 1
- 702 A general power-of-d dispatching framework for heterogeneous systems. 1 0
- 701 Optimal combustion calibration for direct-injection compression-ignition engines using multiple injections. 146808742210879 0
- 700 A Nonlinear Dynamic Optimization Algorithm of a Novel Energy Efficient Pneumatic Drive System. **2022**, 20, 1593-1604
- 699 Design and Application of Hierarchical Multi-objective Predictive Control for Continuous Flow Stirred Tank Reactor. **2022**, 20, 1500-1508
- 698 Incorporating AC Power Flow into the Multi-Energy System Optimization Framework COMANDO. **2022**,
- 697 Simultaneous topology and fiber path optimization of composite structures with MAC constraints. **2022**, 115645 1
- 696 Trajectory Optimization and Control of a Free-Floating Two-Arm Humanoid Robot. 1-15 0

- 695 Continuous Reactor Network Design for Multi-Product Rigid Polyols Under Uncertainty.
- 694 Optimal control of a NASCAR specification race car. 1-26 1
- 693 Safe-by-design planner/tracker synthesis with a hierarchy of system models. **2022**,
- 692 PARAMETER AND UNCERTAINTY ESTIMATION IN STOCHASTIC DIFFERENTIAL EQUATION MODELS WITH MULTI-RATE DATA AND NONSTATIONARY DISTURBANCES. **2022**, 0
- 691 A muscle control strategy to alter pedal force direction under multiple constraints: A simulation study.. **2022**, 138, 111114
- 690 Generalized link cost function and network design for dedicated truck platoon lanes to improve energy, pavement sustainability and traffic efficiency. **2022**, 140, 103667 0
- 689 Optimal collision-avoiding deceleration when approaching a stochastically vanishing obstacle. **2022**, 142, 110323
- 688 Multi-terminal phase-changing soft open point SDP modeling for imbalance mitigation in active distribution networks. **2022**, 142, 108228 0
- 687 A quadratic voltage model with modifications for optimal power flow of meshed networks. **2022**, 142, 108191
- 686 MPC and Optimal Design of Residential Buildings with Seasonal Storage: A Case Study. **2022**, 129-160
- 685 Dynamic service placement and request scheduling for edge networks. **2022**, 108997
- 684 Nonsmooth Modeling for Simulation and Optimization of Continuous Pharmaceutical Manufacturing Processes. **2022**, 231-252
- 683 Efficient Numerical Optimal Control for Highly Oscillatory Systems. **2022**, 1-1 0
- 682 Dynamic Scaling of a Wing Structure Model Using Topology Optimization. **2022**, 10, 374 1
- 681 Complexity, exactness, and rationality in polynomial optimization. *Mathematical Programming*, 2.1
- 680 Unified static equilibrium modeling and analysis of elastic rods with large deformations for complex constraints. **2022**, 106583
- 679 Theoretic Background of Computer Solution of Combinatorial and Geometric Configuration Problems. **2021**,
- 678 Design and Implementation of Image Processing Based Fire Fighting Robot. **2022**, 417-427

- 677 An affine-scaling interior-point filter line-search algorithm for constrained optimization. **2022**, 16, 174830262210939
- 676 Lagrangian Relaxation Method for Multiobjective Optimization Methods: Solution Approaches. **2022**, 10, 1619-1630
- 675 Neuromechanical Model-Based Adaptive Control of Bilateral Ankle Exoskeletons: Biological Joint Torque and Electromyogram Reduction Across Walking Conditions. **2022**, 1-15 3
- 674 A survey of HPC algorithms and frameworks for large-scale gradient-based nonlinear optimization.
- 673 Deep Reinforcement Learning for Optimal Experimental Design in Biology. 0
- 672 Approaches to Parameter Estimation from Model Neurons and Biological Neurons. **2022**, 15, 168
- 671 Design of static and dynamic ridge filters for FLASH-IMPT: a simulation study. 0
- 670 Optimal Artificial Neural Network Architecture Design for Modeling an Industrial Ethylene Oxide Plant. **2022**, 107850 0
- 669 Predictive modeling of a subcritical pulverized-coal power plant for optimization: Parameter estimation, validation, and application. **2022**, 319, 119226 0
- 668 Dynamic Collision and Deadlock Avoidance for Multiple Robotic Manipulators. **2022**, 10, 55766-55781
- 667 Density Control of Large-Scale Particles Swarm Through PDE-Constrained Optimization. **2022**, 1-10
- 666 Online Fault Diagnosis of Pv Array Considering Label Errors Based on Distributionally Robust Logistic Regression.
- 665 Design, Characterization, and Dynamic Simulation of the MAHI Open Exoskeleton Upper Limb Robot. **2022**, 1-10 1
- 664 Cloud-Based Optimal Control of Individual Borehole Heat Exchangers in a Geothermal Field. 0
- 663 Optimization-based hexapod robot locomotion generation. **2022**, ahead-of-print,
- 662 Nonholonomic Reorientation of Free-Flying Space Robots Using Parallelogram Actuation in Joint Space. 1-11
- 661 A multicut Generalized Benders Decomposition approach for the integration of process operations and dynamic optimization for continuous systems. **2022**, 107859 0
- 660 Implementation of the moving control volume and filling front concepts in modelling solid-liquid extraction of vegetable oil from porous and non-porous solids in a fixed bed. **2022**, 111154



- 659 A comparison of wind turbine blade parametrization schemes for planform design optimization. **2022**, 2265, 042037
- 658 Bridging the Gap in Technology Transfer for Advanced Process Control with Industrial Applications. **2022**, 22, 4149 2
- 657 Optimization under Rare Chance Constraints. **2022**, 32, 930-958 1
- 656 Generalized Parameter Estimation Method for Model-Based Real-Time Optimization. **2022**, 117754
- 655 Comparison of sequential and variational assimilation methods to improve hydrological predictions in snow dominated mountainous catchments. **2022**, 127981 1
- 654 Effects of Reduced Achilles Subtendons Relative Displacement on Healthy Elderly Walking: A Simulation Study.
- 653 Grasp Pose Learning from Human Demonstration with Task Constraints. **2022**, 105, 0
- 652 Optimal Control of Chlorine Concentration in Water Distribution System. **2022**, 0
- 651 Optimization-Based Motion Generation for Buzzwire Tasks With the REEM-C Humanoid Robot. **2022**, 9,
- 650 Application of an equation-oriented framework to formulate and estimate parameters of chemical looping reaction models. 0
- 649 Computational Design of Laser-Cut Bending-Active Structures. **2022**, 103335 0
- 648 Evaluation of the optimal performance of ModiCon and ModiCon+VariCol simulated moving bed variants. **2022**, 1675, 463182
- 647 Insights into Dynamic Process Intensification for Reactive Distillation Columns. **2022**, 177, 108978 0
- 646 A review of modelling approaches to characterize lithium-ion battery energy storage systems in techno-economic analyses of power systems. **2022**, 166, 112584 1
- 645 From Here to Full Inoculation: How an Epidemiological-Economic Model Can Help as We Rollout Vaccines.
- 644 Adaptive Reference Inverse Optimal Control for Natural Walking With Musculoskeletal Models. **2022**, 30, 1567-1575
- 643 A simple suboptimal moving horizon estimation scheme with guaranteed robust stability. **2022**, 1-1
- 642 Momentum-Aware Trajectory Optimization and Control for Agile Quadrupedal Locomotion. **2022**, 1-8 0

- 641 Trajectory Planning and Tracking via MPC for Transient Control of Liquid-Propellant Rocket Engines. **2022**, 715-732
- 640 Scheduling Delays and Curtailment for Household Appliances with Deterministic Load Profiles using MPC. **2022**, 1-1
- 639 Data-Driven Multiple Shooting for Stochastic Optimal Control. **2022**, 1-1 0
- 638 Auto-Tuning of Controller and Online Trajectory Planner for Legged Robots. **2022**, 1-8 0
- 637 Reliable Time-Optimal Point to Point Handling of Unmounted Objects with Industrial Robots. **2022**, 210-219
- 636 Continuous Optimization for Control of Hybrid Systems With Hysteresis via Time-Freezing. **2022**, 6, 3182-3187
- 635 NOSNOC: A Software Package for Numerical Optimal Control of Nonsmooth Systems. **2022**, 6, 3110-3115 0
- 634 Evaluation of Hydropower Equivalent Parameters Over Time. **2022**, 0
- 633 Network Synthesis under Delay Constraints: The Power of Network Calculus Differentiability. **2022**,
- 632 Computational analysis of impedance transformations for four-wire power networks with sparse neutral grounding. **2022**, 0
- 631 On enhancing the transmission efficiency of modulated UWB signals under different emission standards. 0
- 630 Pyomo. DOE : An Open-Source Package for Model-Based Design of Experiments in Python. 1
- 629 Blood flow topology optimization considering a thrombosis model. **2022**, 65,
- 628 Optimal estimation of complex aerial movements using dynamic optimisation. 1-16 2
- 627 Core Components of an Optimization Framework for Engineering Systems based on Automatic Differentiation. **2022**,
- 626 Approximating a linear multiplicative objective in watershed management optimization. **2022**,
- 625 Rigorous mathematical optimization of synthetic hepatic vascular trees. **2022**, 19, 1
- 624 Time Stability of Strong Boundary Conditions in Finite-Difference Schemes for Hyperbolic Systems. **2022**, 60, 1331-1362 1

|     |  |   |
|-----|--|---|
| 623 | High-Dimensional Dynamic Stochastic Model Representation. <b>2022</b> , 44, C210-C236  | 0 |
| 622 | Optimal Hormone Replacement Therapy in Hypothyroidism - A Model Predictive Control Approach. <b>2022</b> , 13,   | 1 |
| 621 | A Julia Framework for Graph-Structured Nonlinear Optimization.   |   |
| 620 | Probabilistic Constraint Tightening Techniques for Trajectory Planning with Predictive Control. <b>2022</b> ,  | 0 |
| 619 | Multidisciplinary Design Optimization Approach to Integrated Space Mission Planning and Spacecraft Design. 1-11  | 0 |
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| 617 | Towards line-restricted dispatchable feeders using probabilistic forecasts for PV-dominated low-voltage distribution grids. <b>2022</b> ,  |   |
| 616 | On the Design of Variable Noise Reduction Systems for Supersonic Transport Take-off Certification Noise Reduction. <b>2022</b> ,   | 1 |
| 615 | Fast Calculation of Single Aircraft Optimal Descent Trajectory. <b>2022</b> ,  |   |
| 614 | CIMTrade. <b>2022</b> ,  | 0 |
| 613 | Online Learning-Based Predictive Control of Crystallization Processes under Batch-to-Batch Parametric Drift.   | 3 |
| 612 | Optimal Control of Cancer Chemotherapy with Delays and State Constraints.  |   |
| 611 | A learning-based approach towards the data-driven predictive control of combined wastewater networks [An experimental study]. <b>2022</b> , 118782   | 0 |
| 610 | Framework of a Power Management System for a Hybrid Electric VTOL Aircraft using Optimal Control. <b>2022</b> ,  | 1 |
| 609 | Long-term stochastic model predictive control for the energy management of hybrid electric vehicles using Pontryagin's minimum principle and scenario-based optimization. <b>2022</b> , 119192 | 1 |
| 608 | Maximum-distance Race Strategies for a Fully Electric Endurance Race Car. <b>2022</b> , 100679   |   |
| 607 | Revisiting moment-closure methods with heterogeneous multiscale population models. <b>2022</b> , 108866  | 1 |
| 606 | Optimizing low-Reynolds-number predation via optimal control and reinforcement learning. <b>2022</b> , 944,  | 3 |

- 605 Advanced-multi-step moving horizon estimation for large-scale nonlinear systems. **2022**, 116, 122-135 0
- 604 Approximate computing, skeleton programming and run-time scheduling in an algorithm for process design and controllability in distributed and heterogeneous infrastructures. **2022**, 164, 107874
- 603 Time optimal control of a non-linear surface vehicle subject to disturbances. **2022**, 21, 100195
- 602 Modelling and optimal energy management for battery energy storage systems in renewable energy systems: A review. **2022**, 167, 112671 6
- 601 Computing saddle graphs via homotopy continuation for the approximate synthesis of mechanisms. **2022**, 176, 104932
- 600 Predictive Simulations to Replicate Human Gait Adaptations and Energetics with Exoskeletons. **2022**, 1-1 0
- 599 The Russell Measures: Economic Inefficiency Decompositions. **2022**, 215-244
- 598 Bioptim, a Python Framework for Musculoskeletal Optimal Control in Biomechanics. **2022**, 1-12 1
- 597 Robust Output-feedback Predictive Control for Proximity Eddy Current De-tumbling with Constraints and Uncertainty. **2022**, 1-14
- 596 The Generalized Distance Function (GDF): Profitability Efficiency Decomposition. **2022**, 167-212
- 595 Optimized designing spherical void structures in 3D domains. **2022**, 331-346
- 594 Conceptual Background: Firms Objectives, Decision Variables, and Economic Efficiency. **2022**, 19-111
- 593 Traffic System State Identification with Integrated Traffic State, Model Parameter and Queue Profile Estimation: Nonlinear Programming Reformulation with Differentiable Traffic State Variables Across Resolutions.
- 592 Solving Problems With Inconsistent Constraints With a Modified Augmented Lagrangian Method. **2022**, 1-8
- 591 Collision Detection for Unions of Convex Bodies With Smooth Boundaries Using Closed-Form Contact Space Parameterization. **2022**, 1-8
- 590 OPF-Learn: An Open-Source Framework for Creating Representative AC Optimal Power Flow Datasets. **2022**,
- 589 Three-Phase Distribution Locational Marginal Pricing for Competitive Electricity Markets with Distributed Generators and Flexible Loads. **2022**,
- 588 Hierarchical Model-Free Transactive Control of Residential Building Loads: An Actual Deployment. **2022**,

- 587 Trajectory Planning for Sensors and Payloads Moving Through Mixed and Uncertain Media. **2022,**
- 586 Computing Funnels Using Numerical Optimization Based Falsifiers\*. **2022,**
- 585 Free-Space Ellipsoid Graphs for Multi-Agent Target Monitoring. **2022,** ○
- 584 Fast and Optimal Trajectory Planning for Multiple Vehicles in a Nonconvex and Cluttered Environment: Benchmarks, Methodology, and Experiments. **2022,**
- 583 Towards Time-Optimal Tunnel-Following for Quadrotors. **2022,** ○
- 582 PyROBOCOP: Python-based Robotic Control & Optimization Package for Manipulation. **2022,** ○
- 581 Controlling of Plate and Ball System with a Nonlinear RHC Approach with a Compromised Length of Time Subintervals. **2022,**
- 580 Trajectory Optimization Formulation with Smooth Analytical Derivatives for Track-leg and Wheel-leg Ground Robots. **2022,**
- 579 CineMPC: Controlling Camera Intrinsic and Extrinsic for Autonomous Cinematography. **2022,**
- 578 Model Predictive Control with Gaussian Processes for Flexible Multi-Modal Physical Human Robot Interaction. **2022,** ○
- 577 Reactive Locomotion Decision-Making and Robust Motion Planning for Real-Time Perturbation Recovery. **2022,** ○
- 576 A Simple Formulation for Fast Prioritized Optimal Control of Robots using Weighted Exact Penalty Functions. **2022,** ○
- 575 Locomotion as a Risk-mitigating Behavior in Uncertain Environments: A Rapid Planning and Few-shot Failure Adaptation Approach. **2022,**
- 574 Foothold Evaluation Criterion for Dynamic Transition Feasibility for Quadruped Robots. **2022,**
- 573 Robust Pivoting: Exploiting Frictional Stability Using Bilevel Optimization. **2022,** ○
- 572 Speed Planning in Dynamic Environments over a Fixed Path for Autonomous Vehicles. **2022,**
- 571 A Framework for Constrained Static State Estimation in Unbalanced Distribution Networks. **2022,** ○
- 570 BESS Optimal Sizing and Scheduling for Energy Arbitrage and Frequency Containment Reserve via Dual-Loop Optimization. **2022,**

- 569 A SIQRB delayed model for cholera and optimal control treatment. 1
- 568 An approximate stochastic optimal control framework to simulate nonlinear neuro-musculoskeletal models in the presence of noise. **2022**, 18, e1009338 4
- 567 Risk-Adapted Optimal Experimental Design. **2022**, 10, 687-716
- 566 Agile rest-to-rest attitude maneuvering of spacecraft using pyramid-type SGCMG based on iteratively recalculated optimal trajectory. **2022**,
- 565 Asymptotically tight conic approximations for chance-constrained AC optimal power flow. **2022**, 0
- 564 Discrete Dynamical System Approaches for Boolean Polynomial Optimization. **2022**, 92, 0
- 563 Human-Centric Intelligent Driving: Collaborating with the Driver to Improve Safety. **2023**, 85-109
- 562 Horizon: A Trajectory Optimization Framework for Robotic Systems. 9,
- 561 Nonlinear Reactor Design Optimization With Embedded Microkinetic Model Information. 4, 0
- 560 Minimum lap time trajectory optimisation of performance vehicles with four-wheel drive and active aerodynamic control. 1-17 0
- 559 Learning-based Motion Stabilizer Leveraging Offline Temporal Optimization. **2022**,
- 558 Balanced Circular Packing Problems with Distance Constraints. **2022**, 10, 113 1
- 557 Alternative regularizations for Outer-Approximation algorithms for convex MINLP.
- 556 OpenCap: 3D human movement dynamics from smartphone videos. 0
- 555 Optimal control of the spatial allocation of COVID-19 vaccines: Italy as a case study. **2022**, 18, e1010237 1
- 554 Fast, Scalable Approximations to Posterior Distributions in Extended Latent Gaussian Models. 1-36
- 553 Energy-optimal overtaking manoeuvres of Formula-E cars. 1-28
- 552 Online Computation of Time-Optimization-Based, Smooth and Path-Consistent Stop Trajectories for Robots. **2022**, 11, 70

- 551 Nonlinear Hybrid Model Predictive Control for building energy systems. **2022**, 112298
- 550 Solving multispecies population games in continuous space and time. **2022**, 146, 36-45 ○
- 549 Nonlinear homotopy interior-point algorithm for 6-DoF powered landing guidance. **2022**, 127, 107707
- 548 Fast trajectory planning and control of a lab-scale 3D gantry crane for a moving target in an environment with obstacles. **2022**, 126, 105255 ○
- 547 Machine learning-based ethylene concentration estimation, real-time optimization and feedback control of an experimental electrochemical reactor. **2022**, 185, 87-107 ○
- 546 Model predictive control for demand flexibility: Real-world operation of a commercial building with photovoltaic and battery systems. **2022**, 7, 100099 2
- 545 General polynomial chaos in the current-voltage formulation of the optimal power flow problem. **2022**, 211, 108472
- 544 Coordinated operation of electricity and gas-hydrogen systems with transient gas flow and hydrogen concentration tracking. **2022**, 211, 108499
- 543 Stochastic model predictive controller for wind farm frequency regulation in waked conditions. **2022**, 211, 108543
- 542 Ineffective control actions in OPF problems: Identification, suppression and security aspects. **2022**, 212, 108228
- 541 Two-stage homotopy method to incorporate discrete control variables into AC-OPF. **2022**, 212, 108283
- 540 Certified and accurate SDP bounds for the ACOPF problem. **2022**, 212, 108278
- 539 Near minimum time trajectory planning for surveying using UAVs. **2022**,
- 538 On Integrating POMDP and Scenario MPC for Planning under Uncertainty with Applications to Highway Driving. **2022**,
- 537 A Neural Network-Based Approximation of Model Predictive Control for a Lithium-Ion Battery with Electro-Thermal Dynamics. **2022**,
- 536 A general two-stage initialization for sag-free deformable simulations. **2022**, 41, 1-13
- 535 LiDAR Based Detect and Avoid System for UAV Navigation in UAM Corridors. **2022**, 6, 185 ○
- 534 Microscopic Traffic Modeling Inside Intersections: Interactions Between Drivers. 6

- 533 Bi-objective design-for-control for improving the pressure management and resilience of water distribution networks. **2022**, 118914 1
- 532 BELTISTOS: A robust interior point method for large-scale optimal power flow problems. **2022**, 212, 108613
- 531 A feasible reduced space method for real-time optimal power flow. **2022**, 212, 108268 0
- 530 A practical approach to flexibility provision assessment in an unobservable distribution network. **2022**, 212, 108262 0
- 529 Day-ahead local flexibility market for active and reactive power with linearized network constraints. **2022**, 212, 108317 2
- 528 Learning to accelerate globally optimal solutions to the AC Optimal Power Flow problem. **2022**, 212, 108275
- 527 Dynamic Complementarity Conditions and Whole-Body Trajectory Optimization for Humanoid Robot Locomotion. **2022**, 1-20 0
- 526 Dynamic Modeling and Nonlinear Model Predictive Control of a Moving Bed Chemical Looping Combustion Reactor. **2022**, 55, 400-405
- 525 ResNet and PolyNet based identification and (MPC) control of dynamical systems: a promising way. **2022**, 1-1
- 524 Nonlinear Model Predictive Control of Floating Offshore Vertical-Axis Wind Turbines.
- 523 Optimal control for a bone metastasis with radiotherapy model using a linear objective functional. **2022**, 17, 32 0
- 522 A Simple Dynamic Optimization-Based Approach for Sizing Thermal Energy Storage Using Process Data.
- 521 Multi-Energy Optimization Under the Water-Energy-Carbon Nexus in a Typical Iron and Steel Plant.
- 520 CPEG: A Convex Predictor-corrector Entry Guidance Algorithm. **2022**, 0
- 519 Research on power flow optimization control strategy of AC-DC hybrid microgrid based on power electronic transformer. **2022**,
- 518 Taylor-series based Convex Approximation Method for Optimization of Active Distribution Networks. **2022**,
- 517 Model predictive control with neural network system model and Bayesian last layer trust regions. **2022**,
- 516 Modern method of topology optimization of products in additive production. **2022**, 27, 301-310



515 Real Time Optimization for Operation of Water Distribution Systems to Water Leakage Reduction. **2022,**

514 Socially-Optimal Auction-Theoretic Intersection Management System. **2022,**

0

513 Mixed-Integer Optimal Control of a Residential Heating Network using Linear and Nonlinear Programming Techniques. **2022,**

512 Nonlinear Model Predictive Control of Electric Vehicle Cabin Cooling System for Improved Thermal Comfort and Efficiency. **2022,**

0

511 Energy-optimal Design and Control of Electric Powertrains under Motor Thermal Constraints. **2022,**

510 Interaction-Aware Moving Target Model Predictive Control for Autonomous Vehicles Motion Planning. **2022,**

509 Optimizing Vaccine Allocation Strategies in Pandemic Outbreaks: An Optimal Control Approach. **2022,**

1

508 Driver-in-the-Loop Contingency MPC with Invariant Sets. **2022,**

507 Optimal Power and Natural Gas Integrated System Considering Energy Storage Using Interior Point optimization (IPOPT). **2022,**

506 Fast and accurate method for computing non-smooth solutions to constrained control problems. **2022,**

0

505 A Deep Recurrent Neural Network Model for affine quasi-LPV System Identification. **2022,**

504 Multi-objective optimization of low-thrust propulsion systems for multi-target missions using ANNs. **2022,**

503 Alpaqa: A matrix-free solver for nonlinear MPC and large-scale nonconvex optimization. **2022,**

502 Dependable Data-based Design of Embedded Model Predictive Control. **2022,**

501 Generating Smooth Near Time-Optimal Trajectories for Steering Drones. **2022,**

500 An Inverse Optimal Control Approach for Trajectory Prediction of Autonomous Race Cars. **2022,**

499 Implementation and Analyses of an Eco-Driving Algorithm for Different Battery Electric Powertrain Topologies Based on a Split Loss Integration Approach. **2022,** 15, 5396

498 Model Predictive Trajectory Optimization and Tracking in Highly Constrained Environments. **2022,** 23, 927-938

3

- 497 Two-phase BESS optimization methodology to enhance the distribution network power quality and mitigate violations. 0
- 496 Dual Switch Simulated Moving Bed Chromatography: An optimal two-fraction yielding separation process. **2022**, 463449 0
- 495 Assortment optimization using an attraction model in an omnichannel environment. **2022**,
- 494 Online Machine Learning Modeling and Predictive Control of Nonlinear Systems With Scheduled Mode Transitions. 1
- 493 A graph-based modeling abstraction for optimization: concepts and implementation in Plasmojl.
- 492 A new global algorithm for factor-risk-constrained mean-variance portfolio selection.
- 491 Personalized mid-course FDG-PET based adaptive treatment planning for non-small cell lung cancer using machine learning and optimization. 1
- 490 Capacity Analysis of Intersections When CAVs Are Crossing in a Collaborative and Lane-Free Order. **2022**, 2, 698-710 1
- 489 Qubit control noise spectroscopy with optimal suppression of dephasing. **2022**, 106, 0
- 488 Defect reconstruction in a two-dimensional semi-analytical waveguide model via derivative-based optimization. **2022**, 152, 1217-1229
- 487 Enhanced growth method for topology and geometry optimization of truss structures. **2022**, 65,
- 486 The Optimal Erection of the Inverted Pendulum. **2022**, 12, 8112
- 485 Change the direction: 3D optimal control simulation by directly tracking marker and ground reaction force data.
- 484 NMPC-based Obstacle Avoidance and Whole-body Motion Planning for Mobile Manipulator. **2022**, 17, 359-364
- 483 Risk-Aware Path Planning for Unmanned Aerial Systems in a Spreading Wildfire. **2022**, 45, 1692-1708
- 482 Distributed model predictive control with priority coordination for limited supply multi-zone HVAC systems. **2022**, 117, 157-168
- 481 Multi-lateral ocean voyage optimization for cargo vessels as a decarbonization method. **2022**, 110, 103407
- 480 A stochastic optimization framework for integrated scheduling and control under demand uncertainty. **2022**, 165, 107931

|     |   |   |
|-----|---|---|
| 479 | Optimal control of real driving emissions. <b>2022</b> , 127, 105269  | 0 |
| 478 | On energy-efficient HVAC operation with Model Predictive Control: A multiple climate zone study. <b>2022</b> , 324, 119752                                  | 1 |
| 477 | Stress-constrained topology optimization of lattice-like structures using component-wise reduced order models. <b>2022</b> , 400, 115525                    | 0 |
| 476 | Using neural network in a model-based predictive control loop to enhance energy performance of buildings. <b>2022</b> , 8, 1196-1207                        | 1 |
| 475 | Battery lifetime extension through optimal design and control of traction and heating systems in hybrid drivetrains. <b>2022</b> , 14, 100196               | 0 |
| 474 | A SCOPF model for congestion management considering power flow controlling devices. <b>2022</b> , 212, 108580   | 1 |
| 473 | Techno-economic sensitivity analysis for combined design and operation of a small modular reactor hybrid energy system. <b>2022</b> , 16, 100191            | 0 |
| 472 | Transient stability constrained optimal power flow considering fourth-order synchronous generator model and controls. <b>2022</b> , 213, 108667             |   |
| 471 | Hub location problem considering spoke links with incentive-dependent capacities. <b>2022</b> , 148, 105959   |   |
| 470 | Certifying global optimality of AC-OPF solutions via sparse polynomial optimization. <b>2022</b> , 213, 108683  |   |
| 469 | Model Predictive Control for Safe Autonomous Driving Applications. <b>2023</b> , 255-282  | 0 |
| 468 | Multi-stage scenario-based MPC for short term oil production optimization under the presence of uncertainty. <b>2022</b> , 118, 95-105                      | 0 |
| 467 | An energy-based strategy to find admissible thrust networks compatible with foundation settlements in masonry structures. <b>2022</b> , 125, 103978         | 0 |
| 466 | Cooperative path and trajectory planning for autonomous vehicles on roads without lanes: A laboratory experimental demonstration. <b>2022</b> , 144, 103813 | 0 |
| 465 | Optimal power flow in four-wire distribution networks: Formulation and benchmarking. <b>2022</b> , 213, 108522  | 0 |
| 464 | Harmonic optimal power flow with transformer excitation. <b>2022</b> , 213, 108604  | 0 |
| 463 | Incorporating gas pipeline leakage failure modes in risk evaluation of electricity-gas integrated energy systems. <b>2023</b> , 144, 108587                 | 0 |
| 462 | A Nonlinear Model Predictive Control Based Evasive Manoeuvre Assist Function. <b>2022</b> , 1166-1174   | 0 |

- 461 Predictive Control of Batch Crystallization Process Using Machine Learning. **2022**, 55, 798-803 ○
- 460 Optimal control and dynamic modulation of the ATPase gene expression for enforced ATP wasting in batch fermentations. **2022**, 55, 174-180 ○
- 459 Optimal control of renewable biohydrogen production: A switched system approach\*. **2022**, 55, 292-297 ○
- 458 Hierarchical nonlinear model predictive control of offshore hybrid power systems. **2022**, 55, 470-476 ○
- 457 Self-Learned Intelligence for Integrated Decision and Control of Automated Vehicles at Signalized Intersections. **2022**, 1-12 ○
- 456 An adaptive multi-cut decomposition based algorithm for integrated closed loop scheduling and control. **2022**, 475-480 ○
- 455 Design of PID controllers using semi-infinite programming. **2022**, 439-444 ○
- 454 Direct Collocation Methods for Trajectory Optimization in Constrained Robotic Systems. **2022**, 1-20 ○
- 453 Quantum Computing and Resilient Design Perspectives for Cybersecurity of Feedback Systems. **2022**, 55, 703-708 ○
- 452 Model Predictive Control of Molten Iron and Slag Quality Indices in a Large-scale Ironmaking Blast Furnace using a Hybrid Dynamic Model\*. **2022**, 55, 138-143 ○
- 451 From-scratch development and improvement of a problem-based learning course: Nonlinear Model Predictive Control for Chemical and Biochemical Processes\*. **2022**, 55, 174-179 ○
- 450 Rapid Scalable Distributed Power Flow with Open-Source Implementation. **2022**, 55, 145-150 ○
- 449 On the Practical Design of Tube-enhanced Multi-stage Nonlinear Model Predictive Control. **2022**, 55, 477-482 ○
- 448 Multilevel Selective Harmonic Modulation by Duality\*. **2022**, 55, 56-61 ○
- 447 Trajectory Planning considering Motion Sickness and Head Movements. **2022**, 55, 113-119 ○
- 446 Dynamic Optimization Study for Cryogenic Distillation in Hydrogen Isotope Separation System. **2022**, 55, 168-173 ○
- 445 Exploring Model Complexity for Trajectory Planning of Autonomous Vehicles in Critical Driving Scenarios. **2022**, 1154-1165 ○
- 444 Optimizing Symptom Based Testing Strategies for Pandemic Mitigation. **2022**, 10, 84934-84945 ○

- 443 A Nested Schur Decomposition Approach for Multiperiod Process Optimization. **2022**, 1129-1134 ○
- 442 Modelling and optimization of emissions in steady state urban traffic networks. **2022**, 55, 31-36 ○
- 441 Multi-objective optimal control for energy extraction and lifetime maximisation in dielectric elastomer wave energy converters. **2022**, 55, 546-551 ○
- 440 Optimal Path Planning for Stereotactic Neurosurgery based on an Elastostatic Cannula Model. **2022**, 55, 600-605 ○
- 439 Simultaneous Optimal Operation and Design of a Thermal Energy Storage Tank for District Heating Systems with Varying Energy Source. **2022**, 1951-1956 ○
- 438 An area-type nonmonotone filter method for nonlinear constrained optimization. **2022**, 7, 20441-20460 ○
- 437 Analysis of control models based on dFBA for fed-batch bioreactors solved by interior-point methods. **2022**, 55, 131-136 ○
- 436 Control of reaction-diffusion models in biology and social sciences. **2022**, 12, 955 ○
- 435 Lane-Free Crossing of CAVs through Intersections as a Minimum-Time Optimal Control Problem. **2022**, 55, 28-33 1
- 434 Gaussian Processes for Simulation-Based Optimization and Robust Design. **2022**, 1243-1248 ○
- 433 Dynamic Real-time Optimization with Closed-Loop Prediction for Nonlinear MPC-controlled Plants. **2022**, 1099-1104 ○
- 432 Dynamic optimisation and comparative analysis of fed-batch and perfusion bioreactor performance for monoclonal antibody (mAb) manufacturing. **2022**, 1117-1122 ○
- 431 Recurrent Neural Network-Based Joint Chance Constrained Stochastic Model Predictive Control\*. **2022**, 55, 780-785 ○
- 430 SQPDFO: A trust-region based algorithm for generally-constrained derivative-free optimization. **2022**, ○
- 429 Learning From Sparse Demonstrations. **2022**, 1-20 1
- 428 Optimal operation of an evaporator for the controlled production of titania nanoparticles. **2022**, 499-504 ○
- 427 Alternating Direction Method of Multipliers for Constrained Iterative LQR in Autonomous Driving. **2022**, 1-12 ○
- 426 Scalable Stochastic Programming with Bayesian Hybrid Models. **2022**, 1309-1314 ○

- 425 Bioprocess Monitoring: A Moving Horizon Estimation Experimental Application. **2022**, 55, 222-227 ○
- 424 On the Implementation of a Preconditioned Riccati Recursion based Primal-Dual Interior-Point Algorithm for Input Constrained Optimal Control Problems?. **2022**, 55, 346-351 ○
- 423 Optimal Lane-Free Crossing of CAVs Through Intersections. **2022**, 1-13 ○
- 422 Optimization of start-up operation for centrifugal chiller. **2022**, 55, 332-337 ○
- 421 Numerically Efficient Discrete-Time Dielectric Elastomer Actuators Models for Optimal Control. **2022**, 55, 540-545 ○
- 420 Nonlinear Tire Model Approximation Using Machine Learning for Efficient Model Predictive Control. **2022**, 1-1 ○
- 419 Duality-based Convex Optimization for Real-time Obstacle Avoidance between Polytopes with Control Barrier Functions. **2022**, ○
- 418 Closed-Form Minkowski Sum Approximations for Efficient Optimization-Based Collision Avoidance. **2022**, ○
- 417 A Numerical Approach for Solving the Inversion Problem for n-Trailer Systems. **2022**, ○
- 416 A Control Barrier Function Perspective on Lyapunov-Based Economic Model Predictive Control. **2022**, ○
- 415 Economic Nonlinear Model Predictive Control of Offshore Vertical-Axis Wind Turbines\*. **2022**, ○
- 414 ScePT: Scene-consistent, Policy-based Trajectory Predictions for Planning. **2022**, ○
- 413 Fusion of Machine Learning and MPC under Uncertainty: What Advances Are on the Horizon?. **2022**, ○
- 412 Rope-Assisted Docking Maneuvers for Autonomous Surface Vessels. **2022**, ○
- 411 Efficient Riccati recursion for optimal control problems with pure-state equality constraints. **2022**, 1
- 410 Using 3D Topological Connectivity for Ghost Particle Reduction in Flow Reconstruction. **2022**, ○
- 409 Koopman-based Differentiable Predictive Control for the Dynamics-Aware Economic Dispatch Problem. **2022**, ○
- 408 Learning-Based Predictive Control with Gaussian Processes: An Application to Urban Drainage Networks. **2022**, ○

|     |  |   |
|-----|--|---|
| 407 | Time-optimal control of cranes subject to container height constraints. <b>2022,</b>   | 0 |
| 406 | Low-Fidelity Gradient Updates for High-Fidelity Reprogrammable Iterative Learning Control. <b>2022,</b>  | 0 |
| 405 | Safe Exploration Learning Supported Model Predictive Control of Repetitive Processes. <b>2022,</b>   | 0 |
| 404 | A Model Predictive Control Scheme for Fast Charging via Accurate Quadratic Battery Models. <b>2022,</b>  | 0 |
| 403 | Reinforcement Learning for Optimal Control of a District Cooling Energy Plant. <b>2022,</b>  | 0 |
| 402 | Power systems optimization under uncertainty: A review of methods and applications. <b>2023,</b> 214, 108725   | 1 |
| 401 | Payload Quantification via Proprioceptive-only Sensing for a Single-legged Vertical Hopper. <b>2022,</b>   | 0 |
| 400 | Model Predictive Control of Air Handling Unit for a Single Zone Setup. <b>2022,</b>  | 0 |
| 399 | Online Learning for Machine Learning-Based Modeling and Predictive Control of Crystallization Processes under Batch-to-Batch Parametric Drift. <b>2022,</b>    | 0 |
| 398 | What Shall We Do with Steel Mill Off-Gas: Polygeneration Systems Minimizing Greenhouse Gas Emissions. <b>2022,</b> 56, 13294-13304                             | 0 |
| 397 | A primal-dual interior-point relaxation method with global and rapidly local convergence for nonlinear programs.   | 0 |
| 396 | Surrogate-based branch-and-bound algorithms for simulation-based black-box optimization.   | 0 |
| 395 | Modifications to the net knee moments lead to the greatest improvements in accelerative sprinting performance: a predictive simulation study. <b>2022,</b> 12, | 0 |
| 394 | Optimization of Lot Size in Lubricant Blending Plants. <b>2023,</b> 203-209  | 0 |
| 393 | Distributed Optimization of District Heating Networks Using Optimality Condition Decomposition. <b>2022,</b> 15, 6605  | 0 |
| 392 | Mitigating intraday wind generation uncertainty with HVDC systems. <b>2022,</b>  | 0 |
| 391 | Optimal Diafiltration Membrane Cascades Enable Green Recycling of Spent Lithium-Ion Batteries. <b>2022,</b> 10, 12207-12225                                    | 0 |
| 390 | A Local Electricity and Carbon Trading Method for Multi-Energy Microgrids Considering Cross-Chain Interaction. <b>2022,</b> 22, 6935                           | 1 |

- 389 Scaling effects of fixed-wing ground-generation airborne wind energy systems. **2022**, 7, 1847-1868 1
- 388 Clinically compatible subject-specific dynamic parallel transmit pulse design for homogeneous fat saturation and water-excitation at 141657T: Proof-of-concept for 14165CEST MRI of the brain. 0
- 387 Recursive state and parameter estimation of COVID-19 circulating variants dynamics. **2022**, 12, 1
- 386 Patterns of asymmetry and energy cost generated from predictive simulations of hemiparetic gait. **2022**, 18, e1010466 1
- 385 Topology optimization of low-friction painting distribution on a marine propeller. **2022**, 65, 0
- 384 Incorporating convex risk measures into multistage stochastic programming algorithms. 0
- 383 Computational advances in polynomial optimization: RAPOSa, a freely available global solver. 0
- 382 Packing convex polygons in minimum-perimeter convex hulls. 0
- 381 Advances in MINLP to Identify Energy-Efficient Distillation Configurations. 0
- 380 Transit facility allocation: Hybrid quantum-classical optimization. **2022**, 17, e0274632 0
- 379 HyKKT: a hybrid direct-iterative method for solving KKT linear systems. 1-24 0
- 378 A feasibility-driven approach to control-limited DDP. 1
- 377 State Estimation in Unbalanced Smart Grids. **2022**, 0
- 376 Optimizing the fuel efficiency of an opposed piston engine for electric power generation. 146808742211210 0
- 375 Convex Optimization for Rendezvous and Proximity Operation via Birkhoff Pseudospectral Method. **2022**, 9, 505 1
- 374 A new fluid-based strategy for the connection of non-matching lattice materials. **2022**, 65, 0
- 373 Configuration-aware model predictive motion planning for Tractor-Trailer Mobile Robot. 1-15 1
- 372 Game Theory-based Parameter Tuning for Energy-Efficient Path Planning on Modern UAVs. 0



|     |   |   |
|-----|---|---|
| 371 | Congestion mitigation in unbalanced residential networks with OPF-based demand management. <b>2022</b> , 100936   | o |
| 370 | Low-Thrust, Multiple-Near-Earth-Asteroid Mission Design with Sample Return to Earth Using Machine Learning. 1-12  | o |
| 369 | Differential flatness-based pseudospectral optimal control of six-degrees-of-freedom aircraft and its issues. 095441002211127                                     | o |
| 368 | Convex optimization under combinatorial sparsity constraints. <b>2022</b> , 50, 632-638   | o |
| 367 | Quasi-Newton Methods. <b>2022</b> , 261-314   | o |
| 366 | Integration of Centralized and Distributed Methods to Mitigate Voltage Unbalance using Solar Inverters. <b>2022</b> , 1-1   | o |
| 365 | Dynamics-Based Optimal Motion Planning of Multiple Lane Changes using Segmentation. <b>2022</b> , 55, 233-240   | o |
| 364 | Mixed-integer and Conditional Trajectory Planning for an Autonomous Mining Truck in Loading/Dumping Scenarios: A Global Optimization Approach. <b>2022</b> , 1-10 | 1 |
| 363 | Learning Stochastic Parametric Differentiable Predictive Control Policies. <b>2022</b> , 55, 121-126  | o |
| 362 | Interior-Point Methods. <b>2022</b> , 599-645   | o |
| 361 | Electric Motor Design Optimization: A Convex Surrogate Modeling Approach. <b>2022</b> , 55, 373-378   | o |
| 360 | Interior-Point Filter Line-Search. <b>2022</b> , 661-678  | o |
| 359 | Autonomous Driving using Linear Model Predictive Control with a Koopman Operator based Bilinear Vehicle Model. <b>2022</b> , 55, 254-259                          | 1 |
| 358 | Simple Bound Constrained Optimization. <b>2022</b> , 411-437  | o |
| 357 | Shared Control of Elbow Movements with Functional Electrical Stimulation and Exoskeleton Assistance. <b>2022</b> ,  | o |
| 356 | TinyAD: Automatic Differentiation in Geometry Processing Made Simple. <b>2022</b> , 41, 113-124   | o |
| 355 | A Novel Segmentation Scheme with Multi-Probability Threshold for Human Activity Recognition Using Wearable Sensors. <b>2022</b> , 22, 7446                        | o |
| 354 | Population games with instantaneous behavior and the Rosenzweig-MacArthur model. <b>2022</b> , 85,  | o |

- 353 Decentralized Weapon-Target Assignment Under Asynchronous Communications. 1-13 ○
- 352 Numerical gate synthesis for quantum heuristics on bosonic quantum processors. 10, ○
- 351 Composite observer-based robust model predictive control technique for ducted fan aerial vehicles. ○
- 350 Multilevel Selective Harmonic Modulation via Optimal Control. **2022**, 86, ○
- 349 Efficient Minimum Flow Decomposition via Integer Linear Programming. ○
- 348 Black-box and surrogate optimization for tuning spiking neural models of striatum plasticity. 16, ○
- 347 Trajectory Optimization of a Planetary Sunshade around the Sun-Earth L1 Point for Solar Geoengineering. **2022**, ○
- 346 Finite Element Approximation of Large-Scale Isometric Deformations of Parametrized Surfaces. **2022**, 60, 2945-2962 ○
- 345 Receding Horizon Trajectory Generation of Stratospheric Airship in Low-Altitude Return Phase. **2022**, 9, 670 1
- 344 Locomotion generation for quadruped robots on challenging terrains via quadratic programming. ○
- 343 Motion Planning and Control for Multi Vehicle Autonomous Racing at High Speeds. **2022**, ○
- 342 Minimum Lap Time Control for 4WIS&4WID Autonomous Vehicle with a Nonlinear Programming Method. **2022**, ○
- 341 Assisting walking balance using a bio-inspired exoskeleton controller. ○
- 340 Optimal path planning of Unmanned Aerial Vehicles (UAVs) for targets touring: Geometric and arc parameterization approaches. **2022**, 17, e0276105 ○
- 339 Simulation-Optimization Framework for the Digital Design of Pharmaceutical Processes Using Pyomo and PharmaPy. ○
- 338 Towards improving the accuracy of musculoskeletal simulation of dynamic three-dimensional spine rotations with optimizing model and algorithm. **2022**, 103916 ○
- 337 Weight Optimization of the Gearbox Using Interior Point Method. ○
- 336 AC Optimal Power Flow: a Conic Programming relaxation and an iterative MILP scheme for Global Optimization. 3, 1-19 ○

- 335 Keyword targeting optimization in sponsored search advertising: Combining selection and matching. **2022**, 56, 101209 ○
- 334 Using stochastic programming to train neural network approximation of nonlinear MPC laws. **2022**, 146, 110665 ○
- 333 Reactive power control in photovoltaic systems through (explainable) artificial intelligence. **2022**, 328, 120004 ○
- 332 Nonlinear Model Predictive Control with aggregated constraints. **2022**, 146, 110649 ○
- 331 Improved crest factor minimization of multisine excitation signals using nonlinear optimization. **2022**, 146, 110654 1
- 330 Traffic-aware gateway placement and queue management in flying networks. **2023**, 138, 103000 1
- 329 Controlling eutrophication by means of water recirculation: An optimal control perspective. **2023**, 421, 114886 ○
- 328 An isogeometric one-dimensional KirchhoffLove type model for developable elastic ribbons. **2023**, 422, 114853 ○
- 327 Nonlinear ensemble gray and black-box system identification of friction induced vibrations in slender rotating structures. **2023**, 186, 109815 ○
- 326 Energy-Optimal Ground Vehicle Trajectory Planning on Deformable Terrains. **2022**, 55, 196-201 ○
- 325 Force Sharing Problem During Gait Using Inverse Optimal Control. **2022**, 1-8 ○
- 324 Economic MPC-based planning for marine vehicles: Tuning safety and energy efficiency. **2022**, 1-11 ○
- 323 Energy Circuit-Based Integrated Energy Management System: Theory, Implementation, and Application. **2022**, 1-28 ○
- 322 NMPC in active subspaces: Dimensionality reduction with recursive feasibility guarantees. **2023**, 147, 110708 ○
- 321 Enhanced moving finite element method based on error geometric estimation for simultaneous trajectory optimization. **2023**, 147, 110711 ○
- 320 Risk-Aware Fast Trajectory Planner for Uncertain Environments Based on Probabilistic Surrogate Reliability and Risk Contours. **2022**, 7, 12435-12442 ○
- 319 Explainable artificial intelligence for deep learning-based model predictive controllers. **2022**, ○
- 318 Parametrization of Airloads Using a Homogeneity-based Orthogonal Decomposition. **2022**, ○

- 317 On affine quasi-LPV System Identification with unknown state-scheduling using (deep) Recurrent Neural Networks\*. **2022**, ○
- 316 Material uncertainty quantification for optimized composite structures with failure criteria. **2022**, 116409 ○
- 315 Modeling approaches for addressing unrelaxable bound constraints with unconstrained optimization methods. ○
- 314 Modeling design and control problems involving neural network surrogates. ○
- 313 Numerical Shape Optimization Among Convex Sets. **2023**, 87, ○
- 312 Optimizable Control Barrier Functions to Improve Feasibility and Add Behavior Diversity while Ensuring Safety. **2022**, 11, 3657 ○
- 311 On multivariate randomized classification trees: l0-based sparsity, VC dimension and decomposition methods. **2022**, 106058 ○
- 310 A Variable Stiffness End-of-Arm Tooling Mechanism to Enhance Dynamic Task Capabilities of Robotic Manipulators. 1-12 ○
- 309 Machine Learning with Gradient-Based Optimization of Nuclear Waste Vitrification with Uncertainties and Constraints. **2022**, 10, 2365 ○
- 308 Optimal Control of Closed Quantum Systems via B-Splines with Carrier Waves. **2022**, 44, A3592-A3616 ○
- 307 Stochastic Convergence Rates and Applications of Adaptive Quadrature in Bayesian Inference. 1-27 ○
- 306 A Homotopic Direct Collocation Approach for Operational-Compliant Trajectory Design. ○
- 305 Stochasticity agnostic solution to the AC optimal power flow by recursive bound tightening with top-down heuristically inducted binary decision trees. ○
- 304 Fairing of Discrete Planar Curves to Integrable Discrete Analogue of Euler's Elasticae. ○
- 303 Isogeometric analysis-based buckling optimization framework for grid-stiffened shells using asymptotic homogenization method and Rayleigh-Bitz method. **2022**, 65, ○
- 302 Cybersecurity and dynamic operation in practice: Equipment impacts and safety guarantees. **2022**, 104898 ○
- 301 A switched system approach for the direct solution of singular optimal control problems. **2022**, 168, 108058 ○
- 300 An implicit function formulation for optimization of discretized index-1 differential algebraic systems. **2022**, 168, 108042 ○

- 299 Metaheuristics Approach for Mathematical Programs with Switching Constraints and Application to Robotic Task Planning. **2022**, ○
- 298 MPC-based path planning for ship collision avoidance under COLREGS. **2022**, ○
- 297 A Proposal of Path Planning for Robots in Warehouses by Model Predictive Control without Using Global Paths. **2022**, 55, 573-578 ○
- 296 A Symmetric Algorithm for Solving Mechanical Contact Problems Using FreeFEM. **2022**, 235-250 ○
- 295 A Cooperation-Aware Lane Change Method for Automated Vehicles. **2022**, 1-16 1
- 294 A dual-control effect preserving formulation for nonlinear output-feedback stochastic model predictive control with constraints. **2022**, 1-1 ○
- 293 Indirect Optimal Control of Advection-Diffusion Fields through Distributed Robotic Swarms. **2022**, 55, 299-304 ○
- 292 An Isogeometric One-Dimensional Model for Developable Flexible Elastic Strips. **2022**, 139-145 ○
- 291 Varying-Radius Tunnel-Following NMPC for Robot Manipulators Using Sequential Convex Quadratic Programming. **2022**, 55, 345-352 ○
- 290 Multi-objective optimization under parametric uncertainty: A Pareto ellipsoids-based algorithm. **2023**, 169, 108099 ○
- 289 Investigating greyness of hybrid model for bioprocess predictive modelling. **2023**, 190, 108761 ○
- 288 Feature selection-based machine learning modeling for distributed model predictive control of nonlinear processes. **2023**, 169, 108074 ○
- 287 Boosting autonomous process design and intensification with formalized domain knowledge. **2023**, 169, 108097 ○
- 286 Real-Time Model Predictive Control and System Identification Using Differentiable Simulation. **2023**, 8, 312-319 ○
- 285 Evaluation of advanced control strategies for building energy systems. **2023**, 280, 112709 ○
- 284 Tool center point control of a large-scale manipulator using absolute position feedback. **2023**, 131, 105388 ○
- 283 Linearizing nonlinear dynamics using deep learning. **2023**, 170, 108104 ○
- 282 Split-based sequential sampling for realtime security assessment. **2023**, 146, 108790 ○

- 281 direpack: A Python 3 package for state-of-the-art statistical dimensionality reduction methods. **2023**, 21, 101282 ○
- 280 Model Predictive Path Following Control without terminal constraints for holonomic mobile robots. **2023**, 132, 105406 1
- 279 Heuristic computing for the novel singular third order perturbed delay differential model arising in thermal explosion theory. **2023**, 16, 104509 1
- 278 A Sequential Sampling-based Particle Swarm Optimization to Control Droop Coefficients of Distributed Generation Units in Microgrid Clusters. **2023**, 216, 109074 ○
- 277 Optimality equivalence and computational advantages of free-floating base dynamics compared to full-body dynamics. **2023**, 181, 105164 ○
- 276 Experiments and modeling to evaluate global reaction kinetics of three-way catalyst light off for net-zero carbon fuels and selected fuel blends. **2023**, 324, 122281 ○
- 275 Path toward sustainable desalination: Sodium precipitation and carbon capture. **2023**, 549, 116324 ○
- 274 A novel two-stage TSODSO coordination approach for managing congestion and voltages. **2023**, 147, 108887 ○
- 273 Identification of vortices in quantum fluids: Finite element algorithms and programs. **2023**, 284, 108606 ○
- 272 Energy reduction of stochastic time-constrained robot stations. **2023**, 81, 102511 ○
- 271 Long-run scarring effects of meltdowns in a small-scale nonlinear quadratic model. **2023**, 75, 103487 ○
- 270 Sharing Traffic Priorities via CyberPhysicalSocial Intelligence: A Lane-Free Autonomous Intersection Management Method in Metaverse. **2022**, 1-12 1
- 269 An algorithmic guide for finite-dimensional optimal control problems. **2022**, ○
- 268 Computational Efficient Personalised EMG-Driven Musculoskeletal Model of Wrist Joint. **2022**, 1-1 ○
- 267 Inequality Constrained Optimal Control for Rope-Assisted ASV Docking Maneuvers. **2022**, 55, 44-49 ○
- 266 Deep Reinforcement Learning Based Adaptation of Pure-Pursuit Path-Tracking Control for Skid-Steered Vehicles. **2022**, 55, 400-407 ○
- 265 Robust sample-based model predictive control of a greenhouse system with parametric uncertainty. **2022**, 55, 177-182 ○
- 264 Fast Tube Model Predictive Control for Driverless Cars Using Linear Data-Driven Models. **2022**, 1-0 ○

- 263 sNMPC: A Matlab Toolbox for Computing Stabilizing Terminal Costs and Sets. **2022**, 55, 19-24 ○
- 262 A Warm-start Strategy in Interior Point Methods for Shrinking Horizon Model Predictive Control with Variable Discretization Step. **2022**, 1-8 ○
- 261 Distributed Eco-Driving Control of a Platoon of Electric Vehicles Through Riccati Recursion. **2022**, 1-16 ○
- 260 A Two-layer MPC Approach for Consistent Planning and Control of Autonomous Vehicles. **2022**, ○
- 259 Distributed Trajectory Planning for Multi-rotor UAVs with Signal Temporal Logic Objectives. **2022**, ○
- 258 Designing a Hardware-Agnostic Interface Between Route and Trajectory Planning in Self-Driving Cars. **2022**, ○
- 257 Cooperative Motion Generation Using Nonlinear Model Predictive Control for Heterogeneous Agents in Warehouse. **2022**, ○
- 256 An internal dynamics approach to predicting batch-end product quality in plastic injection molding using Recurrent Neural Networks. **2022**, ○
- 255 A Symmetry Calibration Procedure for Sensor-to-Airframe Misalignments in Wind Tunnel Data. **2022**, ○
- 254 A General Multi-System Learning Control Framework and its Application to Non-Synchronized Experiments. **2022**, ○
- 253 Fast Initialization of Control Parameters using Supervised Learning on Data from Similar Assets. **2022**, ○
- 252 Deception-Based Cyber Attacks on Hierarchical Control Systems using Domain-Aware Koopman Learning\*. **2022**, ○
- 251 Decoupled Piecewise Linear Relaxation for the AC Optimal Power Flow Problem. **2022**, ○
- 250 Linear Temporal Logic-based Mixed-Integer Linear Problem Planning with the Koopman Operator. **2022**, ○
- 249 Robust Decentralized Multi Robot Navigation using Tube based Model Predictive Control and Optimal Reciprocal Collision Avoidance. **2022**, ○
- 248 Optimal Electric Vehicle Charging using Real-Time Coordinated and Decentralized Cooperating Heat Pump in Community Grids. **2022**, ○
- 247 Identification of Intraday False Data Injection Attack on DER Dispatch Signals. **2022**, ○
- 246 Comparative Study on Collision Avoidance Methods in Path Planning for Warehouse Robots Using MPC. **2022**, ○

- 245 Efficient Preconditioners for Interior Point Methods via a New Schur Complement-Based Strategy. **2022**, 43, 1680-1711 ○
- 244 Predictive multibody dynamic simulation of human neuromusculoskeletal systems: a review. ○
- 243 Deep reinforcement learning for optimal experimental design in biology. **2022**, 18, e1010695 ○
- 242 Microgrids with Flexible Boundaries for Service Restoration. **2023**, 189-225 ○
- 241 Co-Optimization of Grid Flexibilities in Recovery Logistics. **2023**, 261-300 ○
- 240 A two-level distributed algorithm for nonconvex constrained optimization. ○
- 239 Inverse Design of Whispering-Gallery Nanolasers with Tailored Beam Shape and Polarization. ○
- 238 On the implementation of a quasi-Newton interior-point method for PDE-constrained optimization using finite element discretizations. 1-32 ○
- 237 Phi-Functions for Objects Bounded by the Second-Order Curves and Their Application to Packing Problems. **2023**, 35-44 ○
- 236 Movement in low gravity environments (MoLo) programme—the MoLo-L.O.O.P. study protocol. **2022**, 17, e0278051 ○
- 235 Modeling and Control of Nonlinear Processes Using Sparse Identification: Using Dropout to Handle Noisy Data. **2022**, 61, 17976-17992 ○
- 234 Wind-optimal lateral trajectories for a multirotor aircraft in urban air mobility. 1, ○
- 233 Trajectory planning for multiple autonomous underwater vehicles with safety guarantees. **2022**, ○
- 232 Motion planning of four-wheeled omnidirectional robots in a NMPC framework. **2022**, ○
- 231 Optimization Modeling for Advanced Syngas to Olefin Reactive Systems. ○
- 230 Anticipating alliances of stakeholders in the optimal design of community energy systems. **2022**, 54, 102880 1
- 229 Scaling from optimal behavior to population dynamics and ecosystem function. **2022**, 101027 ○
- 228 What Data Are Most Valuable to Screen Ionic Liquid Entrainers for Hydrofluorocarbon Refrigerant Reuse and Recycling?. **2022**, 61, 18412-18425 ○



- 227 Suboptimal nonlinear model predictive control with input move-blocking. 1-10 ○
- 226 PDENLPModels.jl: An NLPModel API for Optimization Problems with PDE-Constraints. **2022**, 7, 4736 ○
- 225 Efficient learning of decision-making models: A penalty block coordinate descent algorithm for data-driven inverse optimization. **2022**, 108123 ○
- 224 A filter sequential adaptive cubic regularization algorithm for nonlinear constrained optimization. ○
- 223 Frhodo: A program for simulating chemical kinetic measurements and optimizing kinetic mechanisms. **2022**, 112509 ○
- 222 Motion Planning and Control of Wheel-legged Robot for Obstacle Crossing. **2022**, 17, 500-507 ○
- 221 Industrial ion-exchange chromatography development using discontinuous Galerkin methods coupled with forward sensitivity analysis. **2022**, 463741 ○
- 220 Phase-field methods for spectral shape and topology optimization. ○
- 219 Model Predictive Control Technique for Ducted Fan Aerial Vehicles Using Physics-Informed Machine Learning. **2023**, 7, 4 ○
- 218 NLoed: A Python Package for Nonlinear Optimal Experimental Design in Systems Biology. **2022**, 11, 3921-3928 ○
- 217 Nonlinear programming reformulation of dynamic flux balance analysis models. **2022**, 108101 ○
- 216 SWFT-Net: a deep learning framework for efficient fine-tuning spot weights towards adaptive proton therapy. **2022**, 67, 245010 ○
- 215 TUM autonomous motorsport: An autonomous racing software for the Indy Autonomous Challenge. ○
- 214 Nonlinear Model Predictive Path Tracking Control for Autonomous Vehicles Based on Orthogonal Collocation Method. **2023**, 21, 257-270 ○
- 213 Binary Control Pulse Optimization for Quantum Systems. 7, 892 1
- 212 Integrating Nonlinear Controllability into a Multidisciplinary Design Process. 1-12 ○
- 211 On topology optimization with gradient-enhanced damage: An alternative formulation based on linear physics. **2023**, 105204 ○
- 210 State and Parameter Estimation for Retinal Laser Treatment. **2023**, 1-13 ○

|     |   |   |
|-----|---|---|
| 209 | A generic optimization framework for resilient systems. 1-30  | 0 |
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| 192 | Distributed Model Predictive Control of Connected Multi-Vehicle Systems at Unsignalized Intersections. <b>2022</b> ,  | 0 |

- 191 BSA - Bi-Stiffness Actuation for optimally exploiting intrinsic compliance and inertial coupling effects in elastic joint robots. **2022,** ○
- 190 A Legendre-Gauss Pseudospectral Collocation Method for Trajectory Optimization in Second Order Systems. **2022,** ○
- 189 Learning Coordinated Terrain-Adaptive Locomotion by Imitating a Centroidal Dynamics Planner. **2022,** ○
- 188 Large-Scale ADMM-based Co-Design of Legged Robots. **2022,** ○
- 187 Motion Planning for Agile Legged Locomotion using Failure Margin Constraints. **2022,** ○
- 186 Differentiable Collision Avoidance Using Collision Primitives. **2022,** 1
- 185 Learning to Solve the AC Optimal Power Flow via a Lagrangian Approach. **2022,** ○
- 184 Energy-Aware Planning-Scheduling for Autonomous Aerial Robots. **2022,** ○
- 183 A Framework for Recognizing Industrial Actions via Joint Angles. **2022,** ○
- 182 Optimization of Humanoid Robot Designs for Human-Robot Ergonomic Payload Lifting. **2022,** ○
- 181 Whole-Body Trajectory Optimization for Robot Multimodal Locomotion. **2022,** ○
- 180 In Situ Adaptive Battery Parameter Estimation Algorithm with Cross-Validation and Observer. **2022,** ○
- 179 Optimizing Bipedal Maneuvers of Single Rigid-Body Models for Reinforcement Learning. **2022,** ○
- 178 Trajectory Optimization for Quadruped Mobile Manipulators that Carry Heavy Payload. **2022,** ○
- 177 Motion Planning for Nonlinear Robotic System based on ADMM and Convex Feasible Set Algorithm. **2022,** ○
- 176 A Sensitivity Assisted Alternating Directions Method of Multipliers for Distributed Optimization. **2022,** ○
- 175 Spatial motion planning with Pythagorean Hodograph curves. **2022,** ○
- 174 Alternating Direction Based Sequential Boolean Quadratic Programming Method for Transmit Antenna Selection. **2022,** ○

- 173 Parallel primal-dual interior point method for the solution of dynamic optimal power flow. ○
- 172 Nonlinear MPC and MHE of a Gasoline Controlled Auto-Ignition Engine based on Reduced-Order Differential Equation Models. **2022**, ○
- 171 Autonomous navigation of interconnected tethered drones in a partially known environment with obstacles. **2022**, ○
- 170 Cooperative Tuning of Multi-Agent Optimal Control Systems. **2022**, ○
- 169 Robust MPC approaches for monotone systems\*. **2022**, ○
- 168 Solving optimal control problems with non-smooth solutions using an integrated residual method and flexible mesh. **2022**, ○
- 167 Quadratic approximation based heuristic for optimization-based coordination of automated vehicles in confined areas. **2022**, ○
- 166 Robust Predictive Output-Feedback Safety Filter for Uncertain Nonlinear Control Systems. **2022**, ○
- 165 A Non-Interior-Point Method for the Optimal Control Problem with Equilibrium Constraints. **2022**, ○
- 164 Guaranteed safe control of systems with parametric uncertainties via neural network controllers. **2022**, ○
- 163 Robust Model Predictive Control for Adaptive Cruise Control with Model Uncertainties. **2022**, ○
- 162 A Feasible Sequential Linear Programming Algorithm with Application to Time-Optimal Path Planning Problems. **2022**, ○
- 161 REAR-END COLLISION ESCAPE ALGORITHM FOR INTELLIGENT VEHICLES SUPPORTED BY VEHICULAR COMMUNICATION. **2022**, 37, 398-410 ○
- 160 The optimal trajectory of road vehicles on straights. **2022**, ○
- 159 A Differentiable Signed Distance Representation for Continuous Collision Avoidance in Optimization-Based Motion Planning. **2022**, ○
- 158 System-Level Recurrent State Estimators for Affine Systems Subject to Data Losses Modeled by Automata. **2022**, ○
- 157 Primal-Dual Estimator Learning Method with Feasibility and Near-Optimality Guarantees. **2022**, ○
- 156 Homogeneous Infeasible Interior Point Method for Convex Quadratic Programs. **2022**, ○

- 155 Design and Resource Allocation of NOMA-based Transmission Scheme for Industrial Collaborative AR. **2022**, ○
- 154 A dynamic game model for assessing risk of coordinated physical-cyber attacks in an AC/DC hybrid transmission system. 10, ○
- 153 Tire Slip H<sub>∞</sub>Control for Optimal Braking Depending on Road Condition. **2023**, 23, 1417 ○
- 152 Optimal control by deep learning techniques and its applications on epidemic models. **2023**, 86, ○
- 151 Gradient-Based Sub-Optimization in the MAUD Architecture without Post-Optimality Sensitivities. **2023**, ○
- 150 Hierarchical distributed optimization of constraint-coupled convex and mixed-integer programs using approximations of the dual function. **2023**, 11, 100058 ○
- 149 Efficient Rate-Splitting Multiple Access for the Internet of Vehicles: Federated Edge Learning and Latency Minimization. **2023**, 1-1 ○
- 148 A Simple and Efficient Structural Topology Optimization Implementation Using Open-Source Software for All Steps of the Algorithm: Modeling, Sensitivity Analysis and Optimization. **2023**, 136, 1371-1397<sup>o</sup>
- 147 Computational aspects of column generation for nonlinear and conic optimization: classical and linearized schemes. ○
- 146 Energy-Minimization Path Planning and Control of Unmanned Aerial Systems for Advanced Air Mobility. **2023**, ○
- 145 Optimal Landing Control of eVTOL Vehicles Using ODE-Based Aerodynamic Model. **2023**, ○
- 144 Optimal Control of Precision Airdrop Trajectories Using Direct Collocation Methods. **2023**, ○
- 143 Predicting Relationship Labels and Individual Personality Traits From Telecommunication History in Social Networks Using Hawkes Processes. **2023**, 11, 8492-8503 ○
- 142 Periodic Optimal Control for Reducing the Fuel Consumption of Flapping Wing Vehicles. **2023**, ○
- 141 Robust Entry Guidance with Atmospheric Adaptation. **2023**, ○
- 140 Maximizing frequency security margin via conventional generation dispatch and battery energy injection. 10, ○
- 139 Economic Model Predictive Control of Nonlinear Systems Using Online Learning of Neural Networks. **2023**, 11, 342 ○
- 138 A quasi-steady-state minimum lap time simulation of race motorcycles using experimental data. 1-23 ○

- 137 Multiple Oracle Algorithm to Solve Continuous Games. **2023**, 149-167 ○
- 136 Fast QC Relaxation of the Optimal Power Flow Using the Line-Wise Model for Representing Meshed Transmission Networks. **2023**, 11, 2775-2786 ○
- 135 Free Energy Barriers for Anti-Freeze Protein Engulfment in Ice: Effects of Supercooling, Footprint Size, and Spatial Separation. ○
- 134 On the effectiveness of sequential linear programming for the pooling problem. ○
- 133 Validation of Tailored Resonant Behavior for Multiscale Optimized Lattice Structures. **2023**, ○
- 132 Six-degree-of-freedom Optimal Feedback Control of Pinpoint Landing using Deep Neural Networks. **2023**, ○
- 131 Model predictive control and moving horizon estimation for adaptive optimal bolus feeding in high-throughput cultivation of E. coli. **2023**, 108158 1
- 130 Nonlinear model predictive control for dividing wall columns. ○
- 129 Bounds and convex heuristics for bi-objective optimal experiment design in water networks. **2023**, 153, 106181 ○
- 128 Algorithm XXXX: A Gradient-Based Implementation of the Polyhedral Active Set Algorithm. ○
- 127 Pandemic meltdown and economic recovery  $\square$  A multi-phase dynamic model, empirics, and policy. **2023**, 6, 100106 ○
- 126 A stochastic distributed control approach for load restoration of networked microgrids with mobile energy storage systems. **2023**, 148, 108999 ○
- 125 Investigating the Impact of Electric Vehicles on the Voltage Profile of Distribution Networks. **2022**, ○
- 124 A Trajectory Planning Method Based on Quad-tree Convex Feasible Set in Unstructured Environments. **2022**, ○
- 123 A Fast Kernel-Based Optimal Control Framework for Autonomous Driving. **2023**, 1-12 ○
- 122 Model Predictive Control for Irrigation Scheduling. **2023**, 1-14 ○
- 121 Optimal control of bioproduction in the presence of population heterogeneity. **2023**, 86, ○
- 120 Accelerating Condensed Interior-Point Methods on SIMD/GPU Architectures. ○

- 119 A fast analytical local path planning method with applications in parking scenarios. 095440702311544 ○
- 118 Scalable Parallel Nonlinear Optimization with PyNumero and Parapint. **2023**, 35, 509-517 ○
- 117 Maximization of Neumann Eigenvalues. **2023**, 247, ○
- 116 Model Predictive Control of Parabolic PDE Systems under Chance Constraints. **2023**, 11, 1372 ○
- 115 Direct approaches for PDE-constrained dynamic optimization based on space-time orthogonal collocation on finite elements. **2023**, 124, 187-198 ○
- 114 Certifiable Solver for Real-Time N-View Triangulation. **2023**, 8, 1999-2005 ○
- 113 Dynamically adaptive networks for integrating optimal pressure management and self-cleaning controls. **2023**, ○
- 112 Multi-energy optimization under the water-energy-carbon nexus in a typical iron and steel plant. **2023**, 224, 120086 ○
- 111 Machine learning-based framework for optimally solving the analytical inverse kinematics for redundant manipulators. **2023**, 91, 102970 ○
- 110 Building Energy Model Calibration Using a Surrogate Neural Network. **2023**, 113057 ○
- 109 A deep learning-based predictive controller for the optimal charging of a lithium-ion cell with non-measurable states. **2023**, 173, 108222 ○
- 108 Parametric aeroelastic modeling, maneuver loads analysis using CFD methods and structural design of a fighter aircraft. **2023**, 136, 108231 ○
- 107 A novel method for the globally optimal design of fixed bed catalytic reactors. **2023**, 271, 118524 ○
- 106 GP CC-OPF: Gaussian Process based optimization tool for Chance-Constrained Optimal Power Flow. **2023**, 16, 100489 ○
- 105 A Gauss-Newton-based decomposition algorithm for Nonlinear Mixed-Integer Optimal Control Problems. **2023**, 152, 110967 ○
- 104 Enhancing level set-based topology optimization with anisotropic graded meshes. **2023**, 447, 127903 ○
- 103 Whole body motion generation with centroidal dynamics of legged robots using sequential bounds tightening of McCormick envelopes. **2023**, 164, 104401 ○
- 102 Field test of Model Predictive Control in residential buildings for utility cost savings. **2023**, 288, 113026 ○

- 101 Nonlinear model predictive control of vanadium redox flow battery. **2023**, 62, 106905 ○
- 100 Data-based modeling and control of nonlinear process systems using sparse identification: An overview of recent results. **2023**, 174, 108247 ○
- 99 Risk-allocation-based index tracking. **2023**, 154, 106219 ○
- 98 Comparison of reinforcement learning and model predictive control for building energy system optimization. **2023**, 228, 120430 ○
- 97 Model predictive control of non-holonomic systems: Beyond differential-drive vehicles. **2023**, 152, 110972 ○
- 96 Point to point time optimal handling of unmounted rigid objects and liquid-filled containers. **2023**, 184, 105286 ○
- 95 A three-stage SCOPF considering fast converter control and generator droop. **2023**, 221, 109385 ○
- 94 Stochastic nonlinear model with individualized plants and demand elasticity for large-scale hydro-thermal power systems. **2023**, 220, 109283 ○
- 93 Hybrid FES-exoskeleton control: Using MPC to distribute actuation for elbow and wrist movements. 17, ○
- 92 Copuling population dynamics and diel migration patterns. **2023**, 151, 19-27 ○
- 91 Numerical Strategies for Mixed-Integer Optimization of Power-Split and Gear Selection in Hybrid Electric Vehicles. **2023**, 24, 3194-3210 ○
- 90 Optimal design-for-control of self-cleaning water distribution networks using a convex multi-start algorithm. **2023**, 231, 119602 ○
- 89 Distributed model predictive control for reconfigurable systems based on Lyapunov analysis. **2023**, 123, 1-11 ○
- 88 Continuous Constrained Optimization. **2022**, 147-274 ○
- 87 An SQP-based multiple shooting algorithm for large-scale PDE-constrained optimal control problems. **2023**, 477, 111927 ○
- 86 Modelling and optimal control of growth, energy, and resource dynamics of *Hermetia illucens* in mass production environment. **2023**, 206, 107649 ○
- 85 Exploring Non-Linear Programming Formulations in QuantumCircuitOpt for Optimal Circuit Design. **2022**, ○
- 84 An Integrated Physical Optimization Framework for Proton Stereotactic Body Radiation Therapy FLASH Treatment Planning Allows Dose, Dose Rate, and Linear Energy Transfer Optimization Using Patient-Specific Ridge Filters. **2023**, ○



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|----|---|---|
| 83 | Thrust Integrated Trajectory Optimization for Multipulse Rocket Missiles Using Convex Programming. 1-15   | ○ |
| 82 | Regularized frictional contact problems with the interior point method.   | ○ |
| 81 | Process as a battery: Electricity price aware optimal operation of zeolite crystallization in a continuous oscillatory baffled reactor. <b>2023</b> , 171, 108143                                 | ○ |
| 80 | Cost optimization of low-salt-rejection reverse osmosis. <b>2023</b> , 551, 116407  | ○ |
| 79 | Nonlinear Moving Horizon Estimation and Model Predictive Control for Buildings with Unknown HVAC Dynamics. <b>2022</b> , 55, 71-76  | ○ |
| 78 | Two-Scale Elastic Shape Optimization for Additive Manufacturing. <b>2023</b> , 21, 119-142  | ○ |
| 77 | Re-understanding and improvement of the pseudo-spectral method for rapid footprint generation. 095441002311537  | ○ |
| 76 | Integrated experimental and photo-mechanistic modelling of biomass and optical density production of fast versus slow growing model cyanobacteria. <b>2023</b> , 70, 102997                       | ○ |
| 75 | Filling holes under non-linear constraints. <b>2023</b> , 42,   | ○ |
| 74 | Change the direction: 3D optimal control simulation by directly tracking marker and ground reaction force data. 11, e14852  | ○ |
| 73 | Machine learning-based ethylene and carbon monoxide estimation, real-time optimization, and multivariable feedback control of an experimental electrochemical reactor. <b>2023</b> , 191, 658-681 | ○ |
| 72 | Model predictive control of legged and humanoid robots: models and algorithms. <b>2023</b> , 37, 298-315  | ○ |
| 71 | Optimization of Grade Transitions in Bulk Poly(propylene) Polymerizations. 2300001  | ○ |
| 70 | On Advanced Modeling of Compressors and Weighted Mix Iteration for Simulation of Gas Transport Networks. <b>2023</b> , 138-152  | ○ |
| 69 | Modeling and Optimal Control of a Two-Species Bioproducing Microbial Consortium. <b>2023</b> , 83, 144-171  | ○ |
| 68 | An optimal control approach to the computation of g-g diagrams. 1-15  | ○ |
| 67 | AWEbox: An Optimal Control Framework for Single- and Multi-Aircraft Airborne Wind Energy Systems. <b>2023</b> , 16, 1900  | ○ |
| 66 | Phenotype-specific estimation of metabolic fluxes using gene expression data. <b>2023</b> , 26, 106201  | ○ |

- 65 State and covariance estimation of a semi-batch reactor for bioprocess applications. **2023**, 172, 108180 ○
- 64 Treatment planning consideration for very high-energy electron FLASH radiotherapy. **2023**, 107, 102539 ○
- 63 A regularized Moving Horizon Estimator for combined state and parameter estimation in a bioprocess experimental application. **2023**, 172, 108183 1
- 62 Visualizing High-Dimensional Functions with Dense Maps. **2023**, 4, ○
- 61 Proportional Packing of Circles in a Circular Container. **2023**, 59, 82-89 ○
- 60 Reducing the number of different members in truss layout optimization. **2023**, 66, ○
- 59 A Two-Stage Trajectory Prediction Algorithm for Mobile Robots Combining the Bayesian and the DMOC Frameworks. **2023**, 39-62 ○
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- 57 Holistic Approach for Aircraft Trajectory Optimization Using Optimal Control. 1-12 ○
- 56 Fitting Math smoothness parameters using automatic differentiation. **2023**, 33, ○
- 55 Policy Iteration for Optimal Control of Discrete-Time Time-Varying Nonlinear Systems. **2023**, 10, 781-791 ○
- 54 Fairing of planar curves to log-aesthetic curves. ○
- 53 Mapping the energy landscape of PROTAC-mediated protein-protein interactions. **2023**, 21, 1885-1892 ○
- 52 Contact-Implicit Planning and Control for Non-prehensile Manipulation Using State-Triggered Constraints. **2023**, 189-204 ○
- 51 CALIPSO: A Differentiable Solver for Trajectory Optimization with Conic and Complementarity Constraints. **2023**, 504-521 ○
- 50 Minimum effort simulations of split-belt treadmill walking exploit asymmetry to reduce metabolic energy expenditure. **2023**, 129, 900-913 ○
- 49 Economic model predictive control with terminal set dynamic programming for tracking control. ○
- 48 Fast Model Predictive Control for Spacecraft Rendezvous and Docking with Obstacle Avoidance. **2023**, 46, 998-1007 ○

- 47 Online Running-Gait Generation for Bipedal Robots with Smooth State Switching and Accurate Speed Tracking. **2023**, 8, 114 ○
- 46 Control Variable Parameterization-based Optimization of Clinical Drug Scheduling for Cancer Chemotherapy with Daily Treatment. **2022**, ○
- 45 Mathematical Model and Solution Algorithm for Virtual Localization Problem. **2022**, 33-44 ○
- 44 Predicting and controlling ecological communities via trait and environment mediated parameterizations of dynamical models. ○
- 43 Mixed-integer nonlinear and continuous optimization formulations for aircraft conflict avoidance via heading and speed deviations. **2023**, ○
- 42 Chance-constrained path planning in narrow spaces for a dubins vehicle. **2021**, 7, 46-61 ○
- 41 Feasibility study of hybrid inverse planning with transmission beams and single-energy spread-out Bragg peaks for proton FLASH radiotherapy. ○
- 40 Comparison of Deterministic and Probabilistic Variational Data Assimilation Methods Using Snow and Streamflow Data Coupled in HBV Model for Upper Euphrates Basin. **2023**, 13, 89 ○
- 39 A Concurrent Framework for Constrained Inverse Kinematics of Minimally Invasive Surgical Robots. **2023**, 23, 3328 ○
- 38 Smoothing inertial method for worst-case robust topology optimization under load uncertainty. **2023**, 66, ○
- 37 A Continuous Model for Demand-Side Management in an Aggregator Model in Electricity Markets. **2023**, 22, ○
- 36 A dynamic foot model for predictive simulations of gait reveals causal relations between foot structure and whole body mechanics. ○
- 35 Sensitivity-Driven Experimental Design to Facilitate Control of Dynamical Systems. **2023**, 196, 855-881 ○
- 34 Static load identification of nonlinear structure based on internal force estimation exemplified by underground straight-wall arch structure. **2023**, 51, 950-961 ○
- 33 A Novel Density Based Approach for Topology Optimization of Stokes Flow. **2023**, 45, A338-A368 ○
- 32 Navigation with Polytopes: A Toolbox for Optimal Path Planning with Polytope Maps and B-spline Curves. **2023**, 23, 3532 ○
- 31 A study on the application and accuracy of macro-scale topology optimization for flow devices containing solid microstructures. **2023**, 66, ○
- 30 Effective algorithms for optimal portfolio deleveraging problem with cross impact. ○

- 29 Holistic Optimal Design of Face-Milled Hypoid Gearsets. **2023**, 145, ○
- 28 Top-Down Control Design Strategy for Electric Power Grid EMP (E3) Protection. **2023**, ○
- 27 Linear turnpike theorem. ○
- 26 Sensitivity-based dynamic performance assessment for model predictive control with Gaussian noise. **2023**, ○
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- 23 Optimal control approaches for open pit planning. ○
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- 17 LSD microdosing attenuates the impact of temporal priors in time perception. ○
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- 11 A new automated strategy for optimizing inclined interplanetary low-thrust trajectories. ○
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- 9 Small signal stability constrained optimal power flow model based on trajectory optimization. **2023**, 9, 489-499 ○
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