

Stefan Streif

List of Publications by Year in descending order

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Version: 2024-02-01

92
papers

1,121
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623734

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all docs

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docs citations

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times ranked

999
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| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | The Effect of Rearing Scale and Density on the Growth and Nutrient Composition of <i>Hermetia illucens</i> (L.) (Diptera: Stratiomyidae) Larvae. <i>Sustainability</i> , 2022, 14, 1772. | 3.2 | 9 |
| 2 | Performance bounds of adaptive MPC with bounded parameter uncertainties. <i>European Journal of Control</i> , 2022, 68, 100688. | 2.6 | 1 |
| 3 | Recursive Feasibility of Continuous-Time Model Predictive Control Without Stabilising Constraints. , 2021, 5, 265-270. | | 19 |
| 4 | On Constructive Extractability of Measurable Selectors of Set-Valued Maps. <i>IEEE Transactions on Automatic Control</i> , 2021, 66, 3757-3764. | 5.7 | 1 |
| 5 | Application of non-destructive sensors and big data analysis to predict physiological storage disorders and fruit firmness in "Braeburn"™ apples. <i>Computers and Electronics in Agriculture</i> , 2021, 183, 106015. | 7.7 | 15 |
| 6 | Experimental verification of an online traction parameter identification method. <i>Control Engineering Practice</i> , 2021, 113, 104837. | 5.5 | 3 |
| 7 | Epidemic management with admissible and robust invariant sets. <i>PLoS ONE</i> , 2021, 16, e0257598. | 2.5 | 8 |
| 8 | On Inf-Convolution-Based Robust Practical Stabilization Under Computational Uncertainty. <i>IEEE Transactions on Automatic Control</i> , 2021, 66, 5530-5537. | 5.7 | 3 |
| 9 | On MPC without terminal conditions for dynamic non-holonomic robots. <i>IFAC-PapersOnLine</i> , 2021, 54, 133-138. | 0.9 | 2 |
| 10 | Tracking of stabilizing, optimal control in fixed-time based on time-varying objective function. , 2021, , . | | 1 |
| 11 | Synthesis of interconnected control systems under reachability specifications. , 2021, , . | | 0 |
| 12 | Practical stability analysis of sliding-mode control with explicit computation of sampling time. <i>Asian Journal of Control</i> , 2020, 22, 1692-1699. | 3.0 | 2 |
| 13 | Converse Optimality for Discrete-Time Systems. <i>IEEE Transactions on Automatic Control</i> , 2020, 65, 2257-2264. | 5.7 | 1 |
| 14 | A comprehensive dynamic growth and development model of <i>Hermetia illucens</i> larvae. <i>PLoS ONE</i> , 2020, 15, e0239084. | 2.5 | 16 |
| 15 | A Q-learning predictive control scheme with guaranteed stability. <i>European Journal of Control</i> , 2020, 56, 167-178. | 2.6 | 8 |
| 16 | On maximal robust positively invariant sets in constrained nonlinear systems. <i>Automatica</i> , 2020, 119, 109044. | 5.0 | 12 |
| 17 | Constructive Analysis of Eigenvalue Problems in Control under Numerical Uncertainty. <i>International Journal of Control, Automation and Systems</i> , 2020, 18, 2177-2185. | 2.7 | 2 |
| 18 | Maintaining Hard Infection Caps in Epidemics via the Theory of Barriers. <i>IFAC-PapersOnLine</i> , 2020, 53, 16100-16105. | 0.9 | 6 |

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|----|---|-----|-----------|
| 19 | A method of online traction parameter identification and mapping. IFAC-PapersOnLine, 2020, 53, 13933-13938. | 0.9 | 3 |
| 20 | Transient stability analysis of power grids with admissible and maximal robust positively invariant sets. Automatisierungstechnik, 2020, 68, 1011-1021. | 0.8 | 3 |
| 21 | Half-Gain Tuning for Active Disturbance Rejection Control. IFAC-PapersOnLine, 2020, 53, 1319-1324. | 0.9 | 6 |
| 22 | Hierarchical Control of a Quadcopter under Stuck Actuator Fault. IFAC-PapersOnLine, 2020, 53, 4258-4263. | 0.9 | 1 |
| 23 | On closed-loop stability of model predictive controllers with learning costs. , 2020, , . | | 3 |
| 24 | Nonsmooth stabilization and its computational aspects. IFAC-PapersOnLine, 2020, 53, 6370-6377. | 0.9 | 1 |
| 25 | Reserve Balancing in a Microgrid System for Safety Analysis. IFAC-PapersOnLine, 2020, 53, 13581-13586. | 0.9 | 3 |
| 26 | A reinforcement learning method with closed-loop stability guarantee for systems with unknown parameters. IFAC-PapersOnLine, 2020, 53, 8157-8162. | 0.9 | 1 |
| 27 | A reinforcement learning method with closed-loop stability guarantee. IFAC-PapersOnLine, 2020, 53, 8043-8048. | 0.9 | 8 |
| 28 | Prototypical Description and Controller Design for a Set of Systems Using $\hat{1}/2$ -gap Based Clustering. IFAC-PapersOnLine, 2020, 53, 4623-4628. | 0.9 | 0 |
| 29 | A Hierarchical MPC Scheme for Ensembles of Hammerstein Systems. IFAC-PapersOnLine, 2020, 53, 6951-6956. | 0.9 | 0 |
| 30 | PoCET: a Polynomial Chaos Expansion Toolbox for Matlab. IFAC-PapersOnLine, 2020, 53, 7256-7261. | 0.9 | 6 |
| 31 | A Hierarchical Architecture for the Coordination of an Ensemble of Steam Generators. IFAC-PapersOnLine, 2020, 53, 11557-11562. | 0.9 | 4 |
| 32 | Model Predictive Control of a Food Production Unit: A Case Study for Lettuce Production. IFAC-PapersOnLine, 2020, 53, 15771-15776. | 0.9 | 4 |
| 33 | Sustainability Analysis of Interconnected Food Production Systems via Theory of Barriers. IFAC-PapersOnLine, 2020, 53, 15765-15770. | 0.9 | 1 |
| 34 | Optimal control of centrifugal spreader. IFAC-PapersOnLine, 2020, 53, 15841-15846. | 0.9 | 2 |
| 35 | Analysis of extremum value theorems for function spaces in optimal control under numerical uncertainty. IMA Journal of Mathematical Control and Information, 2019, 36, 1015-1032. | 1.7 | 2 |
| 36 | Adaptive Dynamic Programming Using Lyapunov Function Constraints. , 2019, 3, 901-906. | | 6 |

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|----|--|------|-----------|
| 37 | Response to IL-6 trans- and IL-6 classic signalling is determined by the ratio of the IL-6 receptor \hat{I}_\pm to gp130 expression: fusing experimental insights and dynamic modelling. Cell Communication and Signaling, 2019, 17, 46. | 6.5 | 89 |
| 38 | Model predictive control with stage cost shaping inspired by reinforcement learning. , 2019, , . | | 2 |
| 39 | Design and Validation of a Low Cost Programmable Controlled Environment for Study and Production of Plants, Mushroom, and Insect Larvae. Applied Sciences (Switzerland), 2019, 9, 5166. | 2.5 | 12 |
| 40 | Adaptive actor-critic structure for parametrized controllers. IFAC-PapersOnLine, 2019, 52, 652-657. | 0.9 | 3 |
| 41 | A Multirate Hierarchical MPC Scheme for Ensemble Systems. , 2018, , . | | 6 |
| 42 | Constrained and Stabilizing Stacked Adaptive Dynamic Programming and a Comparison with Model Predictive Control. , 2018, , . | | 6 |
| 43 | Integer-Free Optimal Scheduling of Smart Appliances. , 2018, , . | | 0 |
| 44 | Hierarchical Control with Guaranteed Fault Diagnosability. IFAC-PapersOnLine, 2018, 51, 1105-1110. | 0.9 | 3 |
| 45 | Addressing infinite-horizon optimization in MPC via Q-learning. IFAC-PapersOnLine, 2018, 51, 60-65. | 0.9 | 11 |
| 46 | Analysis of the Caratheodory s theorem on dynamical system trajectories under numerical uncertainty. IEEE/CAA Journal of Automatica Sinica, 2018, 5, 787-793. | 18.1 | 3 |
| 47 | Practical Sample-and-Hold Stabilization of Nonlinear Systems Under Approximate Optimizers. , 2018, 2, 569-574. | | 8 |
| 48 | Fast stochastic model predictive control of end-to-end continuous pharmaceutical manufacturing 1 Financial support from Novartis is acknowledged.. Computer Aided Chemical Engineering, 2018, , 353-378. | 0.5 | 5 |
| 49 | Comparison of Different Calibration Methods in a Non-invasive ICP Assessment Model. Acta Neurochirurgica Supplementum, 2018, 126, 79-84. | 1.0 | 7 |
| 50 | Constructive analysis of control system stability. IFAC-PapersOnLine, 2017, 50, 7467-7474. | 0.9 | 3 |
| 51 | Optimal traction control for heavy-duty vehicles. Control Engineering Practice, 2017, 69, 99-111. | 5.5 | 20 |
| 52 | Stacked adaptive dynamic programming with unknown system model. IFAC-PapersOnLine, 2017, 50, 4150-4155. | 0.9 | 6 |
| 53 | Design of an active noise controller for reduction of tire/road interaction noise in environmentally friendly vehicles. , 2017, , . | | 4 |
| 54 | Set-based Experiment Design for Model Discrimination Using Bilevel Optimization. IFAC-PapersOnLine, 2016, 49, 295-299. | 0.9 | 1 |

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|----|--|-----|-----------|
| 55 | Experimental results of slip control with a fuzzy-logic-assisted unscented Kalman filter for state estimation. , 2016, , . | | 6 |
| 56 | Robustness analysis, prediction, and estimation for uncertain biochemical networks: An overview. Journal of Process Control, 2016, 42, 14-34. | 3.3 | 29 |
| 57 | A Probabilistic Approach to Robust Optimal Experiment Design with Chance Constraints. IFAC-PapersOnLine, 2015, 48, 100-105. | 0.9 | 30 |
| 58 | Controller Verification and Parametrization Subject to Quantitative and Qualitative Requirements. IFAC-PapersOnLine, 2015, 48, 1174-1179. | 0.9 | 7 |
| 59 | Stability for receding-horizon stochastic model predictive control. , 2015, , . | | 21 |
| 60 | A Two-level Approach for Fusing Early Signaling Events and Long Term Cellular Responses. IFAC-PapersOnLine, 2015, 48, 1228-1233. | 0.9 | 3 |
| 61 | Detection and isolation of parametric faults in hydraulic pumps using a set-based approach and quantitative“qualitative fault specifications. Control Engineering Practice, 2015, 40, 61-70. | 5.5 | 19 |
| 62 | Guaranteed active fault diagnosis for uncertain nonlinear systems. , 2014, , . | | 12 |
| 63 | Set-based state of charge estimation for lithium-ion batteries. , 2014, , . | | 6 |
| 64 | Modellbasierte Zustandsschätzung für Lithium-Ionen-Batterien. Automatisierungstechnik, 2014, 62, 296-311. | 0.8 | 1 |
| 65 | Fast stochastic model predictive control of high-dimensional systems. , 2014, , . | | 36 |
| 66 | Stochastic nonlinear model predictive control with probabilistic constraints. , 2014, , . | | 138 |
| 67 | Probabilistic and Set-based Model Invalidation and Estimation Using LMIs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4110-4115. | 0.4 | 6 |
| 68 | Optimal Experimental Design for Probabilistic Model Discrimination Using Polynomial Chaos. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4103-4109. | 0.4 | 18 |
| 69 | Active Fault Diagnosis for Nonlinear Systems with Probabilistic Uncertainties. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7079-7084. | 0.4 | 38 |
| 70 | Guaranteed Set-based Controller Parameter Estimation for Nonlinear Systems “ Magnetic Levitation Platform as a Case Study. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4650-4655. | 0.4 | 4 |
| 71 | Robust Nonlinear Model Predictive Control with Constraint Satisfaction: A Relaxation-based Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 11073-11079. | 0.4 | 18 |
| 72 | Nonlinear observability and identifiability of single cells in battery packs. , 2013, , . | | 7 |

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|----|--|------|-----------|
| 73 | Estimation of consistent parameter sets for continuous-time nonlinear systems using occupation measures and LMI relaxations. , 2013, , . | | 5 |
| 74 | Guaranteed diagnosability of parametric faults in nonlinear systems. , 2013, , . | | 1 |
| 75 | Structural Problem Reduction for Set-based Fault Diagnosis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 595-600. | 0.4 | 2 |
| 76 | Inner Approximations of Consistent Parameter Sets by Constraint Inversion and Mixed-Integer Programming. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 321-326. | 0.4 | 7 |
| 77 | Certifying Robustness of Separating Inputs and Outputs in Active Fault Diagnosis for Uncertain Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 837-842. | 0.4 | 6 |
| 78 | Robustness Analysis, Prediction and Estimation for Uncertain Biochemical Networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 1-20. | 0.4 | 10 |
| 79 | Identification of Growth Phases and Influencing Factors in Cultivations with AGE1.HN Cells Using Set-Based Methods. PLoS ONE, 2013, 8, e68124. | 2.5 | 11 |
| 80 | Outlier analysis in set-based estimation for nonlinear systems using convex relaxations. , 2013, , . | | 4 |
| 81 | Complete Diagnosability of Abrupt Faults Using Set-based Sensitivities. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 860-865. | 0.4 | 10 |
| 82 | ADMIT: a toolbox for guaranteed model invalidation, estimation and qualitativeâ€“quantitative modeling. Bioinformatics, 2012, 28, 1290-1291. | 4.1 | 35 |
| 83 | Photonic Crystal Light Collectors in Fish Retina Improve Vision in Turbid Water. Science, 2012, 336, 1700-1703. | 12.6 | 71 |
| 84 | Combining qualitative information and semiâ€“quantitative data for guaranteed invalidation of biochemical network models. International Journal of Robust and Nonlinear Control, 2012, 22, 1157-1173. | 3.7 | 21 |
| 85 | A predictive computational model of the kinetic mechanism of stimulus-induced transducer methylation and feedback regulation through CheY in archaeal phototaxis and chemotaxis. BMC Systems Biology, 2010, 4, 27. | 3.0 | 11 |
| 86 | A comparative study of stochastic analysis techniques. , 2010, , . | | 10 |
| 87 | Quantitative analysis of signal transduction in motile and phototactic cells by computerized light stimulation and model based tracking. Review of Scientific Instruments, 2009, 80, 023709. | 1.3 | 6 |
| 88 | Identification of Archaea-specific chemotaxis proteins which interact with the flagellar apparatus. BMC Microbiology, 2009, 9, 56. | 3.3 | 76 |
| 89 | Commutativity of Immersion and Linearization. IEEE Transactions on Automatic Control, 2009, 54, 826-829. | 5.7 | 4 |
| 90 | Flagellar Rotation in the Archaeon Halobacterium salinarum Depends on ATP. Journal of Molecular Biology, 2008, 384, 1-8. | 4.2 | 76 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 91 | Commutativity of immersion and linearization. , 2007, , . | | 0 |
| 92 | A constructive version of the extremum value theorem for spaces of vector-valued functions. Journal of Logic and Analysis, 0, , . | 0.5 | 2 |