Frank Allgöwer

List of Publications by Year
in descending order

573 papers	15,228 citations	24978 57 h-index	30010 103 g-index
591 all docs	591 docs citations	591 times ranked	7423 citing authors

#	ARTICLE	IF	CITATIONS
1	A Quasi-Infinite Horizon Nonlinear Model Predictive Control Scheme with Guaranteed Stabilityâ—âˆ—This paper was not presented at any IFAC meeting. This paper was accepted for publication in revised form by Associate Editor W. Bequette under the direction of Editor Prof. S. Skogestad.. Automatica, 1998, 34, 1205-1217.	3.0	1,228
2	An internal model principle is necessary and sufficient for linear output synchronization. Automatica, 2011, 47, 1068-1074.	3.0	782
3	Real-time optimization and nonlinear model predictive control of processes governed by differential-algebraic equations. Journal of Process Control, 2002, 12, 577-585.	1.7	573
4	Robust output feedback model predictive control of constrained linear systems. Automatica, 2006, 42, 1217-1222.	3.0	398
5	CONSTRUCTIVE SAFETY USING CONTROL BARRIER FUNCTIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 462-467.	0.4	290
6	State and Output Feedback Nonlinear Model Predictive Control: An Overview. European Journal of Control, 2003, 9, 190-206.	1.6	281
7	Data-Driven Model Predictive Control With Stability and Robustness Guarantees. IEEE Transactions on Automatic Control, 2021, 66, 1702-1717.	3.6	273
8	Bistability Analyses of a Caspase Activation Model for Receptor-induced Apoptosis. Journal of Biological Chemistry, 2004, 279, 36892-36897.	1.6	262
9	High performance feedback for fast scanning atomic force microscopes. Review of Scientific Instruments, 2001, 72, 3320-3327.	0.6	240
10	Delay robustness in consensus problems. Automatica, 2010, 46, 1252-1265.	3.0	239
11	Consensus in Multi-Agent Systems With Coupling Delays and Switching Topology. IEEE Transactions on Automatic Control, 2011, 56, 2976-2982.	3.6	191
12	Robust model predictive control for nonlinear discrete-time systems. International Journal of Robust and Nonlinear Control, 2003, 13, 229-246.	2.1	189
13	Robust output feedback model predictive control of constrained linear systems: Time varying case. Automatica, 2009, 45, 2082-2087.	3.0	178
14	Nominal stability of real-time iteration scheme for nonlinear model predictive control. IET Control Theory and Applications, 2005, 152, 296-308.	1.7	168
15	Tube MPC scheme based on robust control invariant set with application to Lipschitz nonlinear systems. Systems and Control Letters, 2013, 62, 194-200.	1.3	154
16	Learning an Approximate Model Predictive Controller With Guarantees. , 2018, 2, 543-548.		153
17	A new control strategy for high-speed atomic force microscopy. Nanotechnology, 2004, 15, 108-114.	1.3	142
18	Constraint-Tightening and Stability in Stochastic Model Predictive Control. IEEE Transactions on Automatic Control, 2017, 62, 3165-3177.	3.6	138

#	ARTICLE	IF	CITATIONS
19	On topology and dynamics of consensus among linear high-order agents. International Journal of Systems Science, 2011, 42, 1831-1842.	3.7	118
20	Robust MPC with recursive model update. Automatica, 2019, 103, 461-471.	3.0	112
21	Distributed model predictive load frequency control of multi-area interconnected power system. International Journal of Electrical Power and Energy Systems, 2014, 62, 289-298.	3.3	105
22	Robust and optimal predictive control of the COVID-19 outbreak. Annual Reviews in Control, 2021, 51, 525-539.	4.4	103
23	A Benchmark for Methods in Reverse Engineering and Model Discrimination: Problem Formulation and Solutions. Genome Research, 2004, 14, 1773-1785.	2.4	101
24	Evaluation study of an efficient output feedback nonlinear model predictive control for temperature tracking in an industrial batch reactor. Control Engineering Practice, 2007, 15, 839-850.	3.2	100
25	Robust Consensus Controller Design for Nonlinear Relative Degree Two Multi-Agent Systems With Communication Constraints. IEEE Transactions on Automatic Control, 2011, 56, 145-151.	3.6	99
26	Cooperative control of dynamically decoupled systems via distributed model predictive control. International Journal of Robust and Nonlinear Control, 2012, 22, 1376-1397.	2.1	99
27	On Necessity and Robustness of Dissipativity in Economic Model Predictive Control. IEEE Transactions on Automatic Control, 2015, 60, 1671-1676.	3.6	98
28	Cooperative control of linear multi-agent systems via distributed output regulation and transient synchronization. Automatica, 2016, 68, 132-139.	3.0	98
29	Robust self-triggered MPC for constrained linear systems: A tube-based approach. Automatica, 2016, 72, 73-83.	3.0	97
30	Delay Robustness in Non-Identical Multi-Agent Systems. IEEE Transactions on Automatic Control, 2012, 57, 1597-1603.	3.6	95
31	Inherent robustness properties of quasi-infinite horizon nonlinear model predictive control. Automatica, 2014, 50, 2269-2280.	3.0	95
32	Unconstrained model predictive control and suboptimality estimates for nonlinear continuous-time systems. Automatica, 2012, 48, 1812-1817.	3.0	94
33	Safe and Fast Tracking on a Robot Manipulator: Robust MPC and Neural Network Control. IEEE Robotics and Automation Letters, 2020, 5, 3050-3057.	3.3	92
34	Identification of models of heterogeneous cell populations from population snapshot data. BMC Bioinformatics, 2011, 12, 125.	1.2	88
35	Analysis and design of polynomial control systems using dissipation inequalities and sum of squares. Computers and Chemical Engineering, 2006, 30, 1590-1602.	2.0	87
36	Nonlinearity measures: definition, computation and applications. Journal of Process Control, 2000, 10, 113-123.	1.7	86

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37	An introduction to interconnection and damping assignment passivity-based control in process engineering. Journal of Process Control, 2009, 19, 1413-1426.	1.7	86
38	Robust data-driven state-feedback design. , 2020, , .		86
39	Nonlinear model predictive control for path following problems. International Journal of Robust and Nonlinear Control, 2015, 25, 1168-1182.	2.1	83
40	Bistable Biological Systems: A Characterization Through Local Compact Input-to-State Stability. IEEE Transactions on Automatic Control, 2008, 53, 87-100.	3.6	82
41	Collective Circular Motion of Unicycle Type Vehicles With Nonidentical Constant Velocities. IEEE Transactions on Control of Network Systems, 2014, 1, 167-176.	2.4	80
42	On consensus in multi-agent systems with linear high-order agents. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1541-1546.	0.4	79
43	Duality and network theory in passivity-based cooperative control. Automatica, 2014, 50, 2051-2061.	3.0	79
44	A Computationally Efficient Robust Model Predictive Control Framework for Uncertain Nonlinear Systems. IEEE Transactions on Automatic Control, 2021, 66, 794-801.	3.6	78
45	A normal form approach to approximate input-output linearization for maximum phase nonlinear SISO systems. IEEE Transactions on Automatic Control, 1996, 41, 305-309.	3.6	77
46	A distributed simplex algorithm for degenerate linear programs and multi-agent assignments. Automatica, 2012, 48, 2298-2304.	3.0	77
47	On robust synchronization of heterogeneous linear multi-agent systems with static couplings. Automatica, 2015, 53, 392-399.	3.0	77
48	Economic model predictive control with self-tuning terminal cost. European Journal of Control, 2013, 19, 408-416.	1.6	74
49	Robust Event-Triggered MPC With Guaranteed Asymptotic Bound and Average Sampling Rate. IEEE Transactions on Automatic Control, 2017, 62, 5694-5709.	3.6	74
50	High-gain adaptive Î»-tracking for nonlinear systems. Automatica, 1997, 33, 881-888.	3.0	71
51	Model predictive control of switched nonlinear systems under average dwell-time. Journal of Process Control, 2012, 22, 1702-1710.	1.7	71
52	One-Shot Verification of Dissipativity Properties From Inputâ€"Output Data. , 2019, 3, 709-714.		71
53	Observer with sample-and-hold updating for Lipschitz nonlinear systems with nonuniformly sampled measurements. , 2008, , .		70
54	Tube-based robust economic model predictive control. Journal of Process Control, 2014, 24, 1237-1246.	1.7	70

#	Article	IF	Citations
55	Performance and design of cycles in consensus networks. Systems and Control Letters, 2013, 62, 85-96.	1.3	67
56	A trajectory-based framework for data-driven system analysis and control. , 2020, , .		66
57	Robustness properties of apoptosis models with respect to parameter variations and intrinsic noise. IET Systems Biology, 2005, 152, 221.	2.0	65
58	Output feedback stabilization of constrained systems with nonlinear predictive control. International Journal of Robust and Nonlinear Control, 2003, 13, 211-227.	2.1	63
59	Decentralized state feedback control for interconnected systems with application to power systems. Journal of Process Control, 2014, 24, 379-388.	1.7	61
60	Nonlinear Reference Tracking: An Economic Model Predictive Control Perspective. IEEE Transactions on Automatic Control, 2019, 64, 254-269.	3.6	61
61	Periodic event-triggered control for networked control systems based on non-monotonic Lyapunov functions. Automatica, 2019, 106, 35-46.	3.0	60
62	Reduction of mathematical models of signal transduction networks: simulation-based approach applied to EGF receptor signalling. IET Systems Biology, 2004, 1, 159-169.	2.0	59
63	Consensus reaching in multi-agent packet-switched networks with non-linear coupling. International Journal of Control, 2009, 82, 953-969.	1.2	57
64	Improving performance in model predictive control: Switching cost functionals under average dwell-time. Automatica, 2012, 48, 402-409.	3.0	56
65	A Polyhedral Approximation Framework for Convex and Robust Distributed Optimization. IEEE Transactions on Automatic Control, 2014, 59, 384-395.	3.6	56
66	Practical synchronization with diffusive couplings. Automatica, 2015, 53, 235-243.	3.0	54
67	An Internal Model Principle for Consensus in Heterogeneous Linear Multi-Agent Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 7-12.	0.4	53
68	A Distributed Control Approach to Formation Balancing and Maneuvering of Multiple Multirotor UAVs. IEEE Transactions on Robotics, 2018, 34, 870-882.	7.3	52
69	A note on stability, robustness and performance of output feedback nonlinear model predictive control. Journal of Process Control, 2003, 13, 633-644.	1.7	51
70	Delay-dependent rendezvous and flocking of large scale multi-agent systems with communication delays. , 2008, , .		51
71	Training Robust Neural Networks Using Lipschitz Bounds. , 2022, 6, 121-126.		51
72	Design of structured dynamic output-feedback controllers for interconnected systems. International Journal of Control, 2011, 84, 2081-2091.	1.2	50

#	Article	IF	Citations
73	Learning-Based Robust Model Predictive Control with State-Dependent Uncertainty. IFAC-PapersOnLine, 2018, 51, 442-447.	0.5	50
74	Model predictive control of constrained LPV systems. International Journal of Control, 2012, 85, 671-683.	1.2	48
75	A Nonlinear Model Predictive Control Framework Using Reference Generic Terminal Ingredients. IEEE Transactions on Automatic Control, 2020, 65, 3576-3583.	3.6	48
76	Stochastic MPC with offline uncertainty sampling. Automatica, 2017, 81, 176-183.	3.0	47
77	On Synchronous Steady States and Internal Models of Diffusively Coupled Systems. IEEE Transactions on Automatic Control, 2013, 58, 2591-2602.	3.6	46
78	An Efficient Algorithm for Nonlinear Model Predictive Control of Large-Scale Systems Part I: Description of the Method (Ein effizienter Algorithmus für die nichtlineare prädiktive Regelung) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.4	44
79	Observers with impulsive dynamical behavior for linear and nonlinear continuous-time systems. , 2007, , .		44
80	Rigidity Maintenance Control for Multi-Robot Systems. , 0, , .		44
81	Adaptiveλ-tracking for nonlinear higher relative degree systems. Automatica, 2005, 41, 1191-1200.	3.0	43
82	Motivation and Learning Progress Through Educational Games. IEEE Transactions on Industrial Electronics, 2007, 54, 3141-3144.	5.2	43
83	On the performance of economic model predictive control with self-tuning terminal cost. Journal of Process Control, 2014, 24, 1179-1186.	1.7	42
84	Frequency synchronization and phase agreement in Kuramoto oscillator networks with delays. Automatica, 2012, 48, 3008-3017.	3.0	41
85	Wound-healing growth factor, basic FGF, induces Erk1/2-dependent mechanical hyperalgesia. Pain, 2013, 154, 2216-2226.	2.0	41
86	Mechanism of PP2A-mediated IKKβ dephosphorylation: a systems biological approach. BMC Systems Biology, 2009, 3, 71.	3.0	40
87	Ensemble Observability of Linear Systems. IEEE Transactions on Automatic Control, 2016, 61, 1452-1465.	3.6	40
88	Simulation of dynamics-coupling in piezoelectric tube scanners by reduced order finite element analysis. Review of Scientific Instruments, 2008, 79, 015105.	0.6	39
89	Parameter identification, experimental design and model falsification for biological network models using semidefinite programming. IET Systems Biology, 2010, 4, 119-130.	0.8	39
90	Convergence in economic model predictive control with average constraints. Automatica, 2014, 50, 3100-3111.	3.0	39

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91	Robust stability and instability of biochemical networks with parametric uncertainty. Automatica, 2011, 47, 1139-1146.	3.0	38
92	On the role of dissipativity in economic model predictive control. IFAC-PapersOnLine, 2015, 48, 110-116.	0.5	38
93	Event-Based Vehicle Coordination Using Nonlinear Unidirectional Controllers. IEEE Transactions on Control of Network Systems, 2018, 5, 1575-1584.	2.4	38
94	Heterogeneity reduces sensitivity of cell death for TNF-Stimuli. BMC Systems Biology, 2011, 5, 204.	3.0	37
95	A novel constraint tightening approach for nonlinear robust model predictive control. , 2018, , .		37
96	Collision avoidance for uncertain nonlinear systems with moving obstacles using robust Model Predictive Control. , 2019, , .		37
97	Nonlinear Model Predictive Control of a Turbocharged Diesel Engine. , 2006, , .		37
98	Discrete-time Incremental ISS: A framework for Robust NMPC. , 2013, , .		36
99	Robust nonlinear control approach to nontrivial maneuvers and obstacle avoidance for quadrotor UAV under disturbances. Robotics and Autonomous Systems, 2017, 98, 317-332.	3.0	36
100	A computationally attractive nonlinear predictive control scheme with guaranteed stability for stable systems. Journal of Process Control, 1998, 8, 475-485.	1.7	34
101	Response to Bistability in Apoptosis: Roles of Bax, Bcl-2, and Mitochondrial Permeability Transition Pores. Biophysical Journal, 2007, 92, 3332-3334.	0.2	34
102	Steady state and (bi-) stability evaluation of simple protease signalling networks. BioSystems, 2007, 90, 591-601.	0.9	34
103	On convergence of averagely constrained economic MPC and necessity of dissipativity for optimal steady-state operation. , 2013, , .		34
104	Robust economic Model Predictive Control using stochastic information. Automatica, 2016, 74, 151-161.	3.0	33
105	Adaptive Model Predictive Control with Robust Constraint Satisfaction. IFAC-PapersOnLine, 2017, 50, 3313-3318.	0.5	33
106	Event-triggered and self-triggered control for linear systems based on reachable sets. Automatica, 2019, 101, 15-26.	3.0	33
107	Nonlinear model predictive control of a four tank system: An experimental stability study. , 2006, , .		32
108	Theory, algorithms and technology in the design of control systems. Annual Reviews in Control, 2006, 30, 19-30.	4.4	32

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109	Pain modulators regulate the dynamics of PKA-RII phosphorylation in subgroups of sensory neurons. Journal of Cell Science, 2014, 127, 216-29.	1.2	32
110	The Role of Sampling for Stability and Performance in Unconstrained Nonlinear Model Predictive Control. SIAM Journal on Control and Optimization, 2014, 52, 581-605.	1.1	32
111	Some problems arising in controller design from big data via input-output methods. , 2016, , .		32
112	Real-Time Optimization for Large Scale Processes: Nonlinear Model Predictive Control of a High Purity Distillation Column. , 2001, , 363-383.		32
113	Analysis of Networked Event-Based Control with a Shared Communication Medium: Part I â€" Pure ALOHA. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10092-10097.	0.4	31
114	A robust adaptive model predictive control framework for nonlinear uncertain systems. International Journal of Robust and Nonlinear Control, 2021, 31, 8725-8749.	2.1	31
115	A nonlinear tracking model predictive control scheme for dynamic target signals. Automatica, 2020, 118, 109030.	3.0	30
116	Barrel temperature control during operation transition in injection molding. Control Engineering Practice, 2008, 16, 1259-1264.	3.2	29
117	Analysis and Simulation of Division- and Label-Structured Population Models. Bulletin of Mathematical Biology, 2012, 74, 2692-732.	0.9	29
118	Nonlinear model predictive control of a four tank system: An experimental stability study. , 0, .		29
119	Self-scheduled H^{∞} output feedback control of descriptor systems. Computers and Chemical Engineering, 2000, 24, 279-284.	2.0	28
120	A Finite Time Unknown Input Observer For Linear Systems. , 2006, , .		28
121	An internal model principle for synchronization. , 2009, , .		28
122	Stabilization of linear systems with distributed input delay. , 2010, , .		28
123	Stochastic thresholds in event-triggered control: A consistent policy for quadratic control. Automatica, 2018, 89, 376-381.	3.0	28
124	ell_{1}-Optimal Control of Large Wind Turbines. IEEE Transactions on Control Systems Technology, 2013, 21, 1079-1089.	3.2	27
125	Hierarchical Clustering of Dynamical Networks Using a Saddle-Point Analysis. IEEE Transactions on Automatic Control, 2013, 58, 113-124.	3.6	27
126	Control Strategies Towards Faster Quantitative Imaging in Atomic Force Microscopy. European Journal of Control, 2005, 11, 384-395.	1.6	26

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127	Nonlinear model predictive control of a turbocharged diesel engine. , 2006, , .		26
128	Linear robust adaptive model predictive control: Computational complexity and conservatism. , 2019, , .		26
129	2. A Stabilizing Real-Time Implementation of Nonlinear Model Predictive Control. , 2007, , 25-52.		25
130	Nonlinear Model Predictive Control: A Passivity-Based Approach. , 2007, , 151-162.		25
131	Robust self-triggered MPC for constrained linear systems. , 2014, , .		25
132	Stabilization of networked control systems with weakly hard real-time dropout description. , 2017, , .		25
133	Model predictive control for autonomous ground vehicles: a review. Autonomous Intelligent Systems, 2021, 1, 1.	2.0	25
134	Sampled-Data Nonlinear Model Predictive Control for Constrained Continuous Time Systems. Lecture Notes in Control and Information Sciences, 2007, , 207-235.	0.6	25
135	Towards a Sampled-Data Theory for Nonlinear Model Predictive Control. Lecture Notes in Control and Information Sciences, 0, , 295-311.	0.6	24
136	Stability Analysis of Time-Delay Systems With Incommensurate Delays Using Positive Polynomials. IEEE Transactions on Automatic Control, 2009, 54, 1019-1024.	3.6	24
137	Analysis of heterogeneous cell populations: A density-based modeling and identification framework. Journal of Process Control, 2011, 21, 1417-1425.	1.7	24
138	Data-driven model predictive control: closed-loop guarantees and experimental results. Automatisierungstechnik, 2021, 69, 608-618.	0.4	24
139	Linear control of nonlinear systems based on nonlinearity measures. Journal of Process Control, 2007, 17, 273-284.	1.7	23
140	Transient average constraints in economic model predictive control. Automatica, 2014, 50, 2943-2950.	3.0	23
141	Sampling strategies for data-driven inference of passivity properties. , 2017, , .		23
142	Finite time convergent observers for nonlinear systems. , 0, , .		22
143	Controller parameterization for SISO and MIMO plants with time delay. Systems and Control Letters, 2006, 55, 794-802.	1.3	22
144	An impulsive observer that estimates the exact state of a linear continuous-time system in predetermined finite time. , 2007, , .		22

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145	Stability analysis of constrained control systems: An alternative approach. Systems and Control Letters, 2007, 56, 93-98.	1.3	22
146	Stabilizing model predictive control for LPV systems subject to constraints with parameter-dependent control law. , 2009, , .		22
147	Enhancing Output-Feedback MPC With Set-Valued Moving Horizon Estimation. IEEE Transactions on Automatic Control, 2018, 63, 2976-2986.	3.6	22
148	On optimal system operation in robust economic MPC. Automatica, 2018, 88, 98-106.	3.0	22
149	Results Towards Identifiability Properties of Biochemical Reaction Networks. , 2006, , .		21
150	On System Gains, Nonlinearity Measures, and Linear Models for Nonlinear Systems. IEEE Transactions on Automatic Control, 2009, 54, 62-78.	3.6	21
151	Cell differentiation modeled via a coupled two-switch regulatory network. Chaos, 2010, 20, 045121.	1.0	21
152	Model predictive control using reduced order models: Guaranteed stability for constrained linear systems. Journal of Process Control, 2014, 24, 1647-1659.	1.7	21
153	A distributed economic MPC framework for cooperative control under conflicting objectives. Automatica, 2018, 96, 368-379.	3.0	21
154	Data-Based System Analysis and Control of Flat Nonlinear Systems. , 2021, , .		21
155	Topology-dependent stability of a network of dynamical systems with communication delays. , 2007, , .		20
156	Nonlinear Multi-Agent System Consensus with Time-Varying Delays. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1522-1527.	0.4	20
157	Cooperative control of linear parameter-varying systems. , 2012, , .		20
158	Robust self-triggered model predictive control for constrained discrete-time LTI systems based on homothetic tubes. , 2015, , .		20
159	Towards Networked Control Systems with guaranteed stability: Using weakly hard real-time constraints to model the loss process. , 2015, , .		20
160	A moment-based approach to ensemble controllability of linear systems. Systems and Control Letters, 2016, 98, 49-56.	1.3	20
161	An Offline-Sampling SMPC Framework With Application to Autonomous Space Maneuvers. IEEE Transactions on Control Systems Technology, 2020, 28, 388-402.	3.2	20
162	On the design of terminal ingredients for data-driven MPC. IFAC-PapersOnLine, 2021, 54, 257-263.	0.5	20

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163	Data-Driven Tracking MPC for Changing Setpoints. IFAC-PapersOnLine, 2020, 53, 6923-6930.	0.5	20
164	General quadratic performance analysis and synthesis of differential algebraic equation (DAE) systems. Journal of Process Control, 2002, 12, 467-474.	1.7	19
165	Polynomial Feedback and Observer Design using Nonquadratic Lyapunov Functions. , 0, , .		19
166	Stability Analysis for Time-Delay Systems using Rekasius's Substitution and Sum of Squares. , 2006, , .		18
167	Generalized Nyquist consensus condition for high-order linear multi-agent systems with communication delays. , 2009, , .		18
168	Model predictive control of constrained non-linear time-delay systems. IMA Journal of Mathematical Control and Information, 2011, 28, 183-201.	1.1	18
169	On the zeros of consensus networks. , 2011, , .		18
170	Sampled Observability and State Estimation of Linear Discrete Ensembles. IEEE Transactions on Automatic Control, 2017, 62, 2406-2418.	3.6	18
171	Dissipativity properties in constrained optimal control: A computational approach. Automatica, 2020, 114, 108840.	3.0	18
172	Robustness of steady-state optimality in economic model predictive control. , 2012, , .		17
173	Real time economic dispatch for power networks: A distributed economic model predictive control approach. , 2017, , .		17
174	Determining dissipation inequalities from input-output samples * *The authors thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart.. IFAC-PapersOnLine, 2017, 50, 7789-7794.	0.5	17
175	Some Ideas on Sampling Strategies for Data-Driven Inference of Passivity Properties for MIMO Systems. , 2018, , .		17
176	Data-driven analysis and control of continuous-time systems under aperiodic sampling. IFAC-PapersOnLine, 2021, 54, 210-215.	0.5	17
177	OUTPUT FEEDBACK NONLINEAR PREDICTIVE CONTROL -A SEPARATION PRINCIPLE APPROACH. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 201-206.	0.4	16
178	Design of biomolecular network modifications to achieve adaptation. IET Systems Biology, 2012, 6, 223-231.	0.8	16
179	Moving horizon $\mathcal{H}_\infty$ control of variable speed wind turbines with actuator saturation. IET Renewable Power Generation, 2014, 8, 498-508.	1.7	16
180	Output synchronization of linear multi-agent systems under constant disturbances via distributed integral action. , 2015, , .		16

#	Article	IF	Citations
181	Distributed model predictive control—Recursive feasibility under inexact dual optimization. Automatica, 2019, 102, 1-9.	3.0	16
182	Stochastic model predictive control without terminal constraints. International Journal of Robust and Nonlinear Control, 2019, 29, 4987-5001.	2.1	16
183	A Finite Time Functional Observer For Linear Systems. , 0, , .		15
184	A nonlinear model predictive control approach for robust end-point property control of a thin-film deposition process. International Journal of Robust and Nonlinear Control, 2007, 17, 1600-1613.	2.1	15
185	Bridging time scales in cellular decision making with a stochastic bistable switch. BMC Systems Biology, 2010, 4, 108.	3.0	15
186	Growing optimally rigid formations. , 2012, , .		15
187	On the Necessity of Diffusive Couplings in Linear Synchronization Problems With Quadratic Cost. IEEE Transactions on Automatic Control, 2015, 60, 3029-3034.	3.6	15
188	An improved constraint-tightening approach for Stochastic MPC. , 2015, , .		15
189	Iterative Learning and Extremum Seeking for Repetitive Time-Varying Mappings. IEEE Transactions on Automatic Control, 2017, 62, 3339-3353.	3.6	15
190	Dissipativity Verification With Guarantees for Polynomial Systems From Noisy Input-State Data. , 2021, 5, 1399-1404.		15
191	The quasi-infinite horizon approach to nonlinear model predictive control. , 2003, , 89-108.		15
192	Mathematical Modeling and Analysis of Force Induced Bone Growth. , 2006, 2006, 3154-7.		14
193	Guaranteed steady state bounds for uncertain (bio-)chemical processes using infeasibility certificates. Journal of Process Control, 2010, 20, 1076-1083.	1.7	14
194	Predictive control for polynomial systems subject to constraints using sum of squares. , 2010, , .		14
195	Analysis of Networked Event-Based Control with a Shared Communication Medium: Part II â€" Slotted ALOHA. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8830-8835.	0.4	14
196	A general distributed MPC framework for cooperative control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 7987-7992.	0.4	14
197	Augmenting MPC Schemes With Active Learning: Intuitive Tuning and Guaranteed Performance. , 2020, 4, 713-718.		14
198	Definition and Computation of a Nonlinearity Measure. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1995, 28, 257-262.	0.4	13

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199	Quantitative nonlinearity assessment â€" An introduction to nonlinearity measures. Computer Aided Chemical Engineering, 2004, 17, 76-95.	0.3	13
200	Certainty-Equivalence Feedback Design With Polynomial-Type Feedbacks Which Guarantee ISS. IEEE Transactions on Automatic Control, 2007, 52, 716-720.	3.6	13
201	Live and let dieâ€"A systems biology view on cell death. Computers and Chemical Engineering, 2009, 33, 583-589.	2.0	13
202	Tube MPC scheme based on robust control invariant set with application to Lipschitz nonlinear systems. , 2011, , .		13
203	Robust Event-Triggered MPC for Constrained Linear Discrete-Time Systems with Guaranteed Average Sampling Rate**The authors would like to thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart. The authors would also like to thank the DFG for their financial support within the research grant AL 316/9-1. This work is also supported by the Innovational Research Incentives Scheme under t. IFAC-PapersOnLine, 2015, 48, 117-122.	0.5	13
204	Consensus-based Distributed Kalman-Bucy Filter for Continuous-time Systems. IFAC-PapersOnLine, 2016, 49, 321-326.	0.5	13
205	Sensitization of glioblastoma cells to TRAIL-induced apoptosis by IAP- and Bcl-2 antagonism. Cell Death and Disease, 2018, 9, 1112.	2.7	13
206	Ensemble Controllability of Cellular Oscillators. , 2019, 3, 296-301.		13
207	Determining optimal inputâ€"output properties: A data-driven approach. Automatica, 2021, 134, 109906.	3.0	13
208	Real-Time Implementation of Nonlinear Model Predictive Control of Batch Processes in an Industrial Framework. , 2007, , 465-472.		13
209	Verifying dissipativity properties from noise-corrupted input-state data. , 2020, , .		13
210	Î¼-Suboptimal design of a robustly performing controller for a chemical reactor. International Journal of Control, 1994, 59, 665-687.	1.2	12
211	Searching bifurcations in high-dimensional parameter space via a feedback loop breaking approach. International Journal of Systems Science, 2009, 40, 769-782.	3.7	12
212	Enlarging the Terminal Region of NMPC with Parameter-Dependent Terminal Control Law. Lecture Notes in Control and Information Sciences, 2009, , 69-78.	0.6	12
213	On the optimal sending rate for Networked Control Systems with a shared communication medium. , 2011, , .		12
214	A constructive approach to Synchronization using relative information. , 2012, , .		12
215	Dynamical optimization using reduced order models: A method to guarantee performance. Journal of Process Control, 2012, 22, 1490-1501.	1.7	12
216	Structured optimal feedback in multi-agent systems: A static output feedback perspective. Automatica, 2017, 76, 214-221.	3.0	12

#	Article	IF	Citations
217	Semi-explicit MPC based on subspace clustering. Automatica, 2017, 83, 309-316.	3.0	12
218	Signal differentiation with genetic networks 1 1Supported by the research cluster BW (www.bwbiosyn.de) of the Ministry for Science, Research and Art Baden-Württemberg.. IFAC-PapersOnLine, 2017, 50, 10938-10943.	0.5	12
219	Bcl-2-mediated control of TRAIL-induced apoptotic response in the non-small lung cancer cell line NCI-H460 is effective at late caspase processing steps. PLoS ONE, 2018, 13, e0198203.	1.1	12
220	Dynamic Resource Allocation to Control Epidemic Outbreaks A Model Predictive Control Approach. , 2018, , .		12
221	On Periodic Dissipativity Notions in Economic Model Predictive Control. , 2018, 2, 501-506.		12
222	Dissipation inequalities in systems theory: An introduction and recent results. , 0, , 23-42.		12
223	Data-Driven Control of Nonlinear Systems: Beyond Polynomial Dynamics. , 2021, , .		12
224	Optimization strategies for a MMA polymerization reactor. Computers and Chemical Engineering, 2007, 31, 281-291.	2.0	11
225	Observability based parameter identifiability for biochemical reaction networks. , 2008, , .		11
226	Kinetic perturbations as robustness analysis tool for biochemical reaction networks. , 2009, , .		11
227	Regulation of Apoptosis via the NFκB Pathway: Modeling and Analysis. , 2009, , 19-33.		11
228	A maximum likelihood estimator for parameter distributions in heterogeneous cell populations. Procedia Computer Science, 2010, 1, 1655-1663.	1.2	11
229	Robust model predictive control with disturbance invariant sets. , 2010, , .		11
230	Parameter Estimation and Identifiability of Biological Networks Using Relative Data. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11648-11653.	0.4	11
231	Optimal and optimal-linear control over lossy, distributed networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13239-13244.	0.4	11
232	Stability of periodically time-varying systems: Periodic Lyapunov functions. Automatica, 2012, 48, 2663-2669.	3.0	11
233	On time-triggered and event-based control of integrator systems over a shared communication system. Mathematics of Control, Signals, and Systems, 2013, 25, 517-557.	1.4	11
234	An inverse problem of tomographic type in population dynamics. , 2014, , .		11

#	Article	IF	Citations
235	Distributed economic MPC: a framework for cooperative control problems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1029-1034.	0.4	11
236	Stabilizing Model Predictive Control without Terminal Constraints for Switched Nonlinear Systems. IFAC-PapersOnLine, 2016, 49, 65-70.	0.5	11
237	Min-max economic model predictive control approaches with guaranteed performance. , 2016, , .		11
238	Cooperative Estimation and Robust Synchronization of Heterogeneous Multiagent Systems With Coupled Measurements. IEEE Transactions on Control of Network Systems, 2018, 5, 1597-1607.	2.4	11
239	Economic model predictive control for snake robot locomotion. , 2019, , .		11
240	Nonlinear Structure Identification of Chemical Processes. Computers and Chemical Engineering, 1997, 21, S137-S142.	2.0	11
241	A Simple Adaptive Observer for Nonlinear Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 781-786.	0.4	10
242	Nonlinear Model Predictive Control and Sum of Squares Techniques. , 2006, , 325-344.		10
243	MODEL PREDICTIVE CONTROL FOR NONLINEAR TIME-DELAY SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 60-65.	0.4	10
244	Estimation of biochemical network parameter distributions in cell populations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1265-1270.	0.4	10
245	Guaranteed Steady-State Bounds for Uncertain Chemical Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 643-648.	0.4	10
246	Computation of the posterior entropy in a Bayesian framework for parameter estimation in biological networks. , 2010, , .		10
247	Unconstrained Nonlinear Model Predictive Control and Suboptimality Estimates for Continuous-Time Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 6733-6738.	0.4	10
248	A distributed simplex algorithm and the multi-agent assignment problem. , 2011, , .		10
249	Network clustering: A dynamical systems and saddle-point perspective. , 2011, , .		10
250	Control over erasure channels: stochastic stability and performance of packetized unconstrained model predictive control. International Journal of Robust and Nonlinear Control, 2013, 23, 1151-1167.	2.1	10
251	Stabilizing linear model predictive control: On the enlargement of the terminal set. , 2013, , .		10
252	Dynamic Pricing Control for Constrained Distribution Networks With Storage. IEEE Transactions on Control of Network Systems, 2015, 2, 88-97.	2.4	10

#	Article	IF	Citations
253	Stabilizing model predictive control: On the enlargement of the terminal set. International Journal of Robust and Nonlinear Control, 2015, 25, 2646-2670.	2.1	10
254	Periodic reference tracking for nonlinear systems via model predictive control. , 2016, , .		10
255	Compensating Drift Vector Fields With Gradient Vector Fields for Asymptotic Submanifold Stabilization. IEEE Transactions on Automatic Control, 2016, 61, 388-399.	3.6	10
256	Indefinite Linear Quadratic Optimal Control: Strict Dissipativity and Turnpike Properties. , 2018, 2, 399-404.		10
257	Predictive Control Over a Dynamical Token Bucket Network. , 2019, 3, 859-864.		10
258	Sampling Strategies for Data-Driven Inference of Input–Output System Properties. IEEE Transactions on Automatic Control, 2021, 66, 1144-1159.	3.6	10
259	Model Predictive Control for Flexible Job Shop Scheduling in Industry 4.0. Applied Sciences (Switzerland), 2021, 11, 8145.	1.3	10
260	LMI-Based Model Predictive Control for Linear Discrete-Time Periodic Systems. Lecture Notes in Control and Information Sciences, 2009, , 99-108.	0.6	10
261	Receding Horizon Control for Linear Periodic Time-Varying Systems Subject to Input Constraints. Lecture Notes in Control and Information Sciences, 2009, , 109-117.	0.6	10
262	MODEL PREDICTIVE CONTROL OF CONTINUOUS TIME NONLINEAR DIFFERENTIAL ALGEBRAIC SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 48-53.	0.4	9
263	Avoidance of Poorly Observable Trajectories: A Predictive Control Perspective. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1952-1957.	0.4	9
264	Model predictive control of constrained nonlinear time-delay systems. , 2009, , .		9
265	ℓ0-System Gain and ℓ1-Optimal Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9230-9235.	0.4	9
266	Resource-aware set-valued estimation for discrete-time linear systems. , 2015, , .		9
267	Linear Weakly Hard Real-Time Control Systems: Time- and Event-Triggered Stabilization. IEEE Transactions on Automatic Control, 2021, 66, 1932-1939.	3.6	9
268	Model-Free Practical Cooperative Control for Diffusively Coupled Systems. IEEE Transactions on Automatic Control, 2022, 67, 754-766.	3.6	9
269	Parameter and Derivative Estimation for Nonlinear Continuous-Time System Identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 663-668.	0.4	8
270	Global Sensitivity Analysis of Biochemical Reaction Networks via Semidefinite Programming. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 9701-9706.	0.4	8

#	Article	IF	Citations
271	Predictive control for constrained discrete-time periodic systems using a time-varying terminal region. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 537-542.	0.4	8
272	Model Predictive Control for Nonlinear Time-Delay Systems without Terminal Constraint. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9254-9259.	0.4	8
273	Design and control of a novel non-raster scan pattern for fast scanning probe microscopy. , 2012, , .		8
274	A visual analytics approach for models of heterogeneous cell populations. Eurasip Journal on Bioinformatics and Systems Biology, 2012, 2012, 4.	1.4	8
275	Threshold-Free Population Analysis Identifies Larger DRG Neurons to Respond Stronger to NGF Stimulation. PLoS ONE, 2012, 7, e34257.	1.1	8
276	Synchronized model matching: a novel approach to cooperative control of nonlinear multi-agent systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1985-1990.	0.4	8
277	Transmission Scheduling in Robust Self-Triggered MPC for Linear Discrete-Time Systems**The authors would like to thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart. The authors would also like to thank the DFG for their financial support within the research grant AL 316/9-1. This work is also supported by the Innovational Research Incentives Scheme under the VICI grant Wireless. IFAC-PapersOnLine, 2015, 48, 132-137.	0.5	8
278	A robust nonlinear controller for nontrivial quadrotor maneuvers: Approach and verification. , 2015, , .		8
279	Delay-dependent data rate bounds for containability of scalar systems * *The authors would like to thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart and the project AL 316/13-1.. IFAC-PapersOnLine, 2017, 50, 7875-7880.	0.5	8
280	Performance oriented triggering mechanisms with guaranteed traffic characterization for linear discrete-time systems. , 2018, , .		8
281	Dual Adaptive MPC for output tracking of linear systems. , 2019, , .		8
282	Distributed economic model predictive control for cooperative supply chain management using customer forecast information. IFAC Journal of Systems and Control, 2021, 15, 100125.	1.1	8
283	A Nonlinear Synchronization Scheme for Hindmarsh-Rose Models. Journal of Electrical Engineering and Technology, 2010, 5, 163-170.	1.2	8
284	Dynamic uncertainties in model predictive control: guaranteed stability for constrained linear systems. , 2020, , .		8
285	Stability Analysis for Nonlinear Weakly Hard Real-Time Control Systems. IFAC-PapersOnLine, 2020, 53, 2594-2599.	0.5	8
286	Data-Driven Analysis and Controller Design for Discrete-Time Systems Under Aperiodic Sampling. IEEE Transactions on Automatic Control, 2023, 68, 3210-3225.	3.6	8
287	The ROBORACE contest. IEEE Control Systems, 2004, 24, 57-60.	1.0	7
288	Robust $\mathcal{H}_1$ performance analysis for linear systems with parametric uncertainties. International Journal of Control, 2008, 81, 851-864.	1.2	7

#	Article	IF	Citations
289	Amplitude distribution of stochastic oscillations in biochemical networks due to intrinsic noise. PMC Biophysics, 2009, 2, 10.	2.2	7
290	Locally constrained decision making via two-stage distributed simplex. , 2011, , .		7
291	A solution for a class of output regulation problems on SO(n). , 2012, , .		7
292	Nonlinear Model Predictive Control for Path Following Problems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 145-150.	0.4	7
293	A new model to simulate and analyze proliferating cell populations in BrdU labeling experiments. BMC Systems Biology, 2013, 7, S4.	3.0	7
294	On stability and stabilization of periodic discrete-time systems with an application to satellite attitude control. Automatica, 2014, 50, 3190-3196.	3.0	7
295	Output Regulation for Control Systems on <inline-formula> <tex-math notation="TeX">$SE(n)$</tex-math></inline-formula>: A Separation Principle Based Approach. IEEE Transactions on Automatic Control, 2014, 59, 3057-3062.	3.6	7
296	Identifiability of population models via a measure theoretical approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1717-1722.	0.4	7
297	On the ensemble observability problem for nonlinear systems. , 2015, , .		7
298	Norm-Controllability of Nonlinear Systems. IEEE Transactions on Automatic Control, 2015, 60, 1825-1840.	3.6	7
299	Exponentially fast distributed coordination for nonsmooth convex optimization. , 2016, , .		7
300	A tube-based approach to nonlinear explicit MPC. , 2016, , .		7
301	Asymptotic stabilization of submanifolds embedded in Riemannian manifolds. Automatica, 2016, 74, 349-359.	3.0	7
302	A Novel Optimal Online Scheduling Scheme for Flexible Manufacturing Systems. IFAC-PapersOnLine, 2019, 52, 1-6.	0.5	7
303	Nonlinear Dynamic Periodic Event-Triggered Control with Robustness to Packet Loss Based on Non-Monotonic Lyapunov Functions. , 2019, , .		7
304	Simultaneous stabilization of discrete-time delay systems and bounds on delay margin. Automatica, 2019, 101, 296-308.	3.0	7
305	Constrained Nonlinear Output Regulation Using Model Predictive Control. IEEE Transactions on Automatic Control, 2022, 67, 2419-2434.	3.6	7
306	An individual-based simulation framework for dynamic, heterogeneous cell populations during extrinsic stimulations. Journal of Coupled Systems and Multiscale Dynamics, 2015, 3, 143-155.	0.2	7

#	ARTICLE	IF	CITATIONS
307	INTEGRATION OF E-LEARNING MODULES IN AUTOMATIC CONTROL EDUCATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 577-582.	0.4	6
308	Fault Diagnosis with Structured Augmented State Models: Modeling, Analysis, and Design. , 2006, , .		6
309	Calculating the terminal region of NMPC for Lure systems via LMIs. , 2008, , .		6
310	A Dissipation Inequality for the Minimum Phase Property. IEEE Transactions on Automatic Control, 2008, 53, 821-826.	3.6	6
311	Robust Stability of Distributed Delay Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 12354-12358.	0.4	6
312	Estimating the fates of the control packets for Networked Control Systems with loss of control and measurement packets. , 2009, , .		6
313	On consensus among identical linear systems using input-decoupled functional observers. , 2010, , .		6
314	General design parameters of model predictive control for nonlinear time-delay systems. , 2010, , .		6
315	Inherent Robustness Properties of Quasi-infinite Horizon MPC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 179-184.	0.4	6
316	Steady–state robustness of qualitative gene regulation networks. International Journal of Robust and Nonlinear Control, 2011, 21, 1742-1758.	2.1	6
317	The performance of event-based control for scalar systems with packet losses. , 2012, , .		6
318	Is it worth to retransmit lost packets in Networked Control Systems?. , 2012, , .		6
319	Obtaining and employing state dependent parametrizations of prespecified complexity in constrained MPC. , 2013, , .		6
320	Practical and Robust Synchronization of Systems with Additive Linear Uncertainties. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 743-748.	0.4	6
321	Scenario-based Stochastic MPC with guaranteed recursive feasibility. , 2015, , .		6
322	On the state estimation problem for discrete ensembles from discrete-time output snapshots. , 2015, , .		6
323	A general sampled observability result and its applications. , 2016, , .		6
324	Fekete Points, Formation Control, and the Balancing Problem. IEEE Transactions on Automatic Control, 2017, 62, 5069-5081.	3.6	6

#	Article	IF	Citations
325	MPC for nonlinear periodic tracking using reference generic offline computations. IFAC-PapersOnLine, 2018, 51, 556-561.	0.5	6
326	Integration of Communication Networks and Control Systems Using a Slotted Transmission Classification Model. , 2019, , .		6
327	Sample-based modeling reveals bidirectional interplay between cell cycle progression and extrinsic apoptosis. PLoS Computational Biology, 2020, 16, e1007812.	1.5	6
328	Efficient stability analysis approaches for nonlinear weakly-hard real-time control systems. Automatica, 2021, 133, 109868.	3.0	6
329	Robust Economic Model Predictive Control without Terminal Conditions. IFAC-PapersOnLine, 2020, 53, 7097-7104.	0.5	6
330	Rollout scheduling and control for disturbed systems via tube MPC. , 2020, , .		6
331	Nonlinear model predictive control for periodic systems using LMIs. , 2009, , .		6
332	A Constraint-Tightening Approach to Nonlinear Stochastic Model Predictive Control under General Bounded Disturbances. IFAC-PapersOnLine, 2020, 53, 7130-7135.	0.5	6
333	Cell cycle progression and transmitotic apoptosis resistance promote escape from extrinsic apoptosis. Journal of Cell Science, 2021, 134, .	1.2	6
334	Towards a practical nonlinear predictive control algorithm with guaranteed stability for large-scale systems. , 1998, , .		5
335	AN LMI APPROACH TOWARDS STABILIZATION OF DISCRETE-TIME DESCRIPTOR SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 77-82.	0.4	5
336	NONLINEAR MODEL PREDICTIVE CONTROL OF BATCH PROCESSES: AN INDUSTRIAL CASE STUDY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 1-6.	0.4	5
337	COMPENSATION OF TIME-VARYING HARMONIC DISTURBANCES ON NONLINEAR BEARINGLESS SLICE MOTORS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 307-312.	0.4	5
338	Editorial: Nonlinear model predictive control. IET Control Theory and Applications, 2005, 152, 257-258.	1.7	5
339	State Estimation for Repetitive Processes Using Iteratively Improving Moving Horizon Observers. , 0, , .		5
340	Linear modeling error and steady-state behaviour of nonlinear dynamical systems. , 0, , .		5
341	Diagnosis of parametric faults in multivariable nonlinear systems. , 2007, , .		5
342	L 2 -Gain based controller design for linear systems with distributed delays and rational delay kernels. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 77-82.	0.4	5

#	ARTICLE	IF	CITATIONS
343	A robustness approach to linear control of mildly nonlinear processes. International Journal of Robust and Nonlinear Control, 2007, 17, 1163-1182.	2.1	5
344	Model Predictive Control. International Journal of Robust and Nonlinear Control, 2008, 18, 799-799.	2.1	5
345	Modeling, Analysis, and Design of Networked Control Systems using Jump Linear Systems (Modellierung, Analyse und Entwurf vernetzter Regelsysteme mithilfe schaltender Systeme). Automatisierungstechnik, 2008, 56, 20-28.	0.4	5
346	Comparison of Different Stability Conditions for Linear Time-Delay Systems with Incommensurate Delays. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 136-141.	0.4	5
347	A Matlab-Based Game for Advanced Automatic Control Education. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 42, 140-145.	0.4	5
348	Controller Structure Design for Decentralized Control of Coupled Higher Order Subsystems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 269-274.	0.4	5
349	Phase synchronization through entrainment by a consensus input. , 2010, , .		5
350	Design of Structured Static Output Feedback Controllers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 271-276.	0.4	5
351	On State-Constrained Control of a CSTR*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 6079-6084.	0.4	5
352	L2-Gain-based controller design for linear systems with distributed input delay. IMA Journal of Mathematical Control and Information, 2011, 28, 225-237.	1.1	5
353	Static Diffusive Couplings in Heterogeneous Linear Networks*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 258-263.	0.4	5
354	Robust cooperative control of dynamically decoupled systems via distributed MPC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 412-417.	0.4	5
355	Death wins against life in a spatially extended model of the caspase-3/8 feedback loop. BioSystems, 2012, 108, 45-51.	0.9	5
356	An explicit solution to constrained stabilization via polytopic tubes. , 2013, , .		5
357	Clock synchronization over directed graphs. , 2013, , .		5
358	A Distributed Solution to the Adjustable Robust Economic Dispatch Problem. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 75-80.	0.4	5
359	A new method for finding minimum phase outputs. , 2014, , .		5
360	Extremum Seeking and Obstacle Avoidance on the Special Orthogonal Group. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 8229-8234.	0.4	5

#	Article	IF	Citations
361	A distributed model predictive control scheme for networks with communication failure. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 12004-12009.	0.4	5
362	Nonlinear Event-Triggered Platooning Control with Exponential Convergenceâ—â—The authors Steffen Linsenmayer and Frank Allgöwer would like to thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart. The work of Dimos Dimarogonas has been supported by the Swedish Research Council (VR).. IFAC-PapersOnLine, 2015, 48, 138-143.	0.5	5
363	A distributed economic MPC scheme for coordination of self-interested systems. , 2016, , .		5
364	Enhancing output feedback MPC for linear discrete-time systems with set-valued moving horizon estimation. , 2016, , .		5
365	A resource dependent protein synthesis model for evaluating synthetic circuits. Journal of Theoretical Biology, 2017, 420, 267-278.	0.8	5
366	Interconnections of dissipative systems and distributed economic MPC. IFAC-PapersOnLine, 2018, 51, 86-91.	0.5	5
367	Bearing-Only Formation Control with Limited Visual Sensing: Two Agent Case. IFAC-PapersOnLine, 2018, 51, 28-33.	0.5	5
368	Optimal Experiment Design and Leveraging Competition for Shared Resources in Cell-Free Extracts. , 2018, , .		5
369	Nonlinearity measures for data-driven system analysis and control. , 2019, , .		5
370	A Petri Net Modeling Framework for the Control of Flexible Manufacturing Systems. IFAC-PapersOnLine, 2019, 52, 492-498.	0.5	5
371	Stability and performance in MPC using a finite-tail cost. IFAC-PapersOnLine, 2021, 54, 166-171.	0.5	5
372	Multi-agent speed consensus via delayed position feedback with application to Kuramoto oscillators. , 2009, , .		5
373	Passivity-based nonlinear dynamic output feedback design: a semidefinite programming approach. , 2004, , .		4
374	Model Predictive Control for Discrete Time Polynomial Control Systems: A Convex Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 123-128.	0.4	4
375	Passivity-based Feedback Design for Polynomial Control Systems (Passivitätsbasierter Reglerentwurf) Tj ETQq1 1 0.784314 rgBT /Overl	0.4	4
376	Robustness Properties and Output Feedback of Optimization Based Sampled-data Open-loop Feedback. , 0, , .		4
377	Simulation of Piezoelectric Tube Actuators by Reduced Finite Element Models for Controller Design. Proceedings of the American Control Conference, 2007, , .	0.0	4
378	Ensuring Task-Independent Safety for Multi-Agent Systems by Feedback. Proceedings of the American Control Conference, 2007, , .	0.0	4

#	Article	IF	Citations
379	Almost sure stability and transient behavior of stochastic nonlinear jump systems motivated by networked control systems. , 2007, , .		4
380	Model predictive control of uncertain continuous-time systems with piecewise constant control input: A convex approach. , 2008, , .		4
381	Model-based vibration suppression in piezoelectric tube scanners through induced voltage feedback. , 2008, , .		4
382	L<inf>2</inf>-gain of Port-Hamiltonian systems and application to a biochemical fermenter model. , 2008, , .		4
383	Predictive control for lure systems subject to constraints using LMIs. , 2009, , .		4
384	Robust Stabilization and H â€°âˆžâ€° Control of Uncertain Distributed Delay Systems. Lecture Notes in Control and Information Sciences, 2009, , 221-231.	0.6	4
385	Generalized Nyquist Consensus Condition for Linear Multi Agent Systems with Heterogeneous Delays. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 24-29.	0.4	4
386	Optimal control over unreliable networks with uncertain loss rates. , 2010, , .		4
387	Unconstrained model predictive control and suboptimality estimates for nonlinear time-delay systems. , 2011, , .		4
388	Nonlinear Predictive Control Based on Time-Domain Simulation for Automatic Landing. , 2011, , .		4
389	Decentralized State Feedback Control for Interconnected Process Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1-10.	0.4	4
390	Output synchronization of linear parameter-varying systems via dynamic couplings. , 2012, , .		4
391	Distributed robust optimization via Cutting-Plane Consensus. , 2012, , .		4
392	Uncertainty-aware visual analysis of biochemical reaction networks. , 2012, , .		4
393	Improved stability conditions for unconstrained nonlinear model predictive control by using additional weighting terms. , 2012, , .		4
394	A projected SQP method for nonlinear optimal control with quadratic convergence. , 2013, , .		4
395	A linear reformulation of Boolean optimization problems and structure identification of gene regulation networks. , 2013, , .		4
396	Improved state dependent parametrizations including a piecewise linear feedback for constrained linear MPC. , 2014, , .		4

#	Article	IF	Citations
397	On the stabilizability of continuous-time systems over a packet based communication system with loss and delay. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6466-6471.	0.4	4
398	Cooperative Estimation for Synchronization of Heterogeneous Multi-Agent Systems Using Relative Information. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4662-4667.	0.4	4
399	Unconstrained nonlinear MPC: Performance estimates for sampled-data systems with zero order hold. , 2015, , .		4
400	Synchronization of diffusively coupled systems on compact Riemannian manifolds in the presence of drift. Systems and Control Letters, 2015, 76, 19-27.	1.3	4
401	Efficient Computation of All Distinct Realization Structures of Kinetic Systems. IFAC-PapersOnLine, 2016, 49, 194-200.	0.5	4
402	Structured State Feedback Controllers and Optimal Submanifold Stabilization. SIAM Journal on Control and Optimization, 2017, 55, 2393-2411.	1.1	4
403	Linear systems with quadratic outputs. , 2017, , .		4
404	Nonlinear Reference Tracking with Model Predictive Control:An Intuitive Approach. , 2018, , .		4
405	Containability With Event-Based Sampling for Scalar Systems With Time-Varying Delay and Uncertainty. , 2018, 2, 725-730.		4
406	A simple framework for nonlinear robust output-feedback MPC. , 2019, , .		4
407	Scheduling and control over networks using MPC with time-varying terminal ingredients. , 2020, , .		4
408	Distributed Model Predictive Control for Consensus of Constrained Heterogeneous Linear Systems. , 2020, , .		4
409	Using genetic algorithm in robust nonlinear model predictive control. Computer Aided Chemical Engineering, 2001, 9, 711-716.	0.3	3
410	CONSTRAINED DERIVATIVE-FREE AUGMENTED STATE ESTIMATION FOR A DIESEL ENGINE AIR PATH. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1382-1387.	0.4	3
411	From Hâˆž Control to Multiobjective Control: An Overview (Von der Hâˆž-Regelung zur) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	0.4	3
412	Stability of Networked Systems with Multiple Delays Using Linear Programming. , 2007, , .		3
413	Fault diagnosis of nonlinear systems using structured augmented state models. International Journal of Automation and Computing, 2007, 4, 141-148.	4.5	3
414	Analysis of Feedback Mechanisms in Cell-biological Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15861-15866.	0.4	3

#	ARTICLE	IF	CITATIONS
415	Verification of multistability in gene regulation networks: A combinatorial approach. , 2009, , .		3
416	Stabilizing design parameters for model predictive control of constrained nonlinear time-delay systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 361-366.	0.4	3
417	Optimal Controller Structure Reduction for Decentralized Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 303-308.	0.4	3
418	Robust Rendezvous of Heterogeneous Euler-Lagrange Systems on Packet-Switched NetworksRobustes Rendezvous von heterogenen Euler-Lagrange Systemen mithilfe paketvermittelnder Netzwerke. Automatisierungstechnik, 2010, 58, 184-191.	0.4	3
419	A relaxation of Lyapunov conditions and controller synthesis for discrete-time periodic systems. , 2010, , .		3
420	Consensus in bistable and multistable multi-agent systems. , 2010, , .		3
421	Stochastic stability and performance estimates of packetized unconstrained model predictive control for networked control systems. , 2011, , .		3
422	Offline NMPC for continuous-time systems using sum of squares. , 2011, , .		3
423	Trajectory-based model reduction of nonlinear biochemical networks employing the observability normal form. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10442-10447.	0.4	3
424	Bifurcation search via feedback loop breaking in biochemical signaling pathways with time delay. Asian Journal of Control, 2011, 13, 691-700.	1.9	3
425	Exact convex formulations of network-oriented optimal operator placement. , 2012, , .		3
426	Relaxed conditions for norm-controllability of nonlinear systems. , 2012, , .		3
427	A unifying framework for stability in MPC using a generalized integral terminal cost. , 2012, , .		3
428	Network-level dynamics of diffusively coupled cells. , 2012, , .		3
429	Finite horizon model predictive control with ellipsoid mapping of uncertain linear systems. IET Control Theory and Applications, 2012, 6, 2820-2828.	1.2	3
430	Practical cluster synchronization of heterogeneous sytems on graphs with acyclic topology. , 2013, , .		3
431	Retransmitting lost measurements to improve remote estimation. , 2013, , .		3
432	Norm-controllability, or how a nonlinear system responds to large inputs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 104-109.	0.4	3

#	Article	IF	Citations
433	On the Steady-State Inverse-Optimality of Passivity-based Cooperative Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 138-143.	0.4	3
434	Distributed and Networked Model Predictive Control. , 2014, , 111-167.		3
435	A Simple Semi-explicit MPC Algorithm. IFAC-PapersOnLine, 2015, 48, 489-494.	0.5	3
436	Improving Performance in Robust Economic MPC Using Stochastic Information**The authors would like to thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart.. IFAC-PapersOnLine, 2015, 48, 410-415.	0.5	3
437	Distributed filter design for cooperative ho-type estimation. , 2015, , .		3
438	Sampled observability of discrete heterogeneous ensembles from anonymized output measurements. , 2015, , .		3
439	Numerical Evaluation of a Robust Self-Triggered MPC Algorithm**The authors would like to thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart. The authors would also like to thank the DFG for their financial support within the research grant AL 316/9-1. This work is also supported by the Innovational Research Incentives Scheme under the VICI grant "Wireless control systems: A new f. IFAC-PapersOnLine, 2016, 49, 151-156.	0.5	3
440	Consensus algorithm–based approach to fundamental modeling of water pipe networks. AICHE Journal, 2017, 63, 3860-3870.	1.8	3
441	Passivity-Based Ensemble Control for Cell Cycle Synchronization. Lecture Notes in Control and Information Sciences - Proceedings, 2018, , 1-13.	0.1	3
442	Data-driven inference of conic relations via saddle-point dynamics. IFAC-PapersOnLine, 2018, 51, 396-401.	0.5	3
443	Periodic optimal control of nonlinear constrained systems using economic model predictive control. Journal of Process Control, 2020, 92, 185-201.	1.7	3
444	Controller and Triggering Mechanism Co-design for Control Over Time-Slotted Networks. IEEE Transactions on Control of Network Systems, 2021, 8, 222-232.	2.4	3
445	Remarks on Moving Horizon State Estimation with Guaranteed Convergence. , 0, , 67-80.		3
446	An NMPC Approach to Avoid Weakly Observable Trajectories. Lecture Notes in Control and Information Sciences, 2009, , 275-284.	0.6	3
447	Multi-agent system consensus in packet-switched networks. , 2007, , .		3
448	Economic model predictive control with self-tuning terminal weight. , 2013, , .		3
449	Sensitivity analysis of programmed cell death and implications for crosstalk phenomena during Tumor Necrosis Factor stimulation. , 2006, , .		3
450	A controller design for Networked Control Systems with random delays via the Jump Linear System approach, which reduces the effects of the delay. , 2009, , .		3

#	Article	IF	Citations
451	Distributed MPC for Consensus and Synchronization. Intelligent Systems, Control and Automation: Science and Engineering, 2014, , 89-100.	0.3	3
452	Stability and performance in transient average constrained economic MPC without terminal constraints. IFAC-PapersOnLine, 2020, 53, 6943-6950.	0.5	3
453	A Resource-Aware Approach to Self-Triggered Model Predictive Control. IFAC-PapersOnLine, 2020, 53, 2733-2738.	0.5	3
454	An approach to gain-scheduled l/sub 1/ -optimal control of linear parameter-varying systems. , 0, , .		2
455	ON COMPLEXITY ISSUES IN MULTIOBJECTIVE CONTROLLER DESIGN USING CONVEX OPTIMIZATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 7-12.	0.4	2
456	Robust l1 Performance Analysis in face of Parametric Uncertainties. , 2006, , .		2
457	Extensions on a certainty-equivalence feedback design with a class of feedbacks which guarantee ISS. , 2008, , .		2
458	Trends in Theory of Control System Design Status report prepared by the IFAC Coordinating Committee on Design Methods. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 2144-2155.	0.4	2
459	Robustification and optimization of a Kalman filter with measurement loss using linear precoding. , 2009, , .		2
460	A set-valued filter for discrete time polynomial systems using sum of squares programming. , 2009, , .		2
461	A robustness measure for the stationary behavior of qualitative gene regulation networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 36-41.	0.4	2
462	Preference Based Group Agreement in Cooperative Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 149-154.	0.4	2
463	On norm-controllability of nonlinear systems. , 2011, , .		2
464	Design of sparse relative sensing networks. , 2012, , .		2
465	Cycles and sparse design of consensus networks. , 2012, , .		2
466	Global Output Regulation for the Rotational Dynamics of a Rigid Body / Globale Ausgangsregelung für die Drehbewegung eines Starrkörpersystems. Automatisierungstechnik, 2013, 61, 567-582.	0.4	2
467	Output regulation for attitude control: A global approach. , 2013, , .		2
468	Economic model predictive control with transient average constraints. , 2013, , .		2

#	Article	IF	Citations
469	Leaderless synchronization of linear multi-agent systems under directed switching topologies: An invariance approach. , 2013, , .		2
470	State dependent parametrizations for nonlinear MPC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1005-1010.	0.4	2
471	Extremum Seeking with Drift† —a —All authors thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart. Hans-Bernd Dürr and Christian Ebenbauer are additionally supported by the German Research Foundation (DFG) within the Emmy-Noether-Grant "Novel Ways in Control and Computation"(EB 425/2-1). IFAC-PapersOnLine, 2015, 48, 126-130.	0.5	2
472	Cooperative ‖‹‹_‒â̂ž</sub>-estimation for large-scale interconnected linear systems. , 2015, , .		2
473	Stabilizing submanifolds with passive input-output relations. , 2015, , .		2
474	A non-monotonic approach to periodic event-triggered control with packet loss. , 2016, , .		2
475	Industrie 4.0 – (R)evolution ohne Regelungstechnik?. Automatisierungstechnik, 2016, 64, 507-520.	0.4	2
476	On the observability properties of systems with rolling shutter. , 2016, , .		2
477	Stabilizing stochastic MPC without terminal constraints. , 2017, , .		2
478	Quasi full information feedback control law of linear systems * *Shuyou Yu, Jing Wang and Hong Chen would like to thank the National Natural Science Foundation of China for financial support within the projects No.61573165 and No.61034001. This research was partially supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2015R1D1A1A01060588). IFAC-PapersOnLine, 2017, 50, 804-809.	0.5	2
479	On Exploration of Supply Chain Properties by Sequential Distributed MPC * *P. Köhler, M. Müller and F. Allgöwer thank the German Research Foundation (DFG) for support of this work within grant AL 316/11-1 and within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart. M. Müller and J. Pannek are also supported by the DFG, grant WO 2056/1. IFAC-PapersOnLine, 2017, 50, 7947-7952.	0.5	2
480	Transient Performance of Tube-based Robust Economic Model Predictive Control. IFAC-PapersOnLine, 2021, 54, 28-35.	0.5	2
481	Predictive Planning and Systematic Action—On the Control of Technical Processes. , 2010, , 9-37.		2
482	A distributed optimization algorithm for Nash bargaining in multi-agent systems. IFAC-PapersOnLine, 2020, 53, 2684-2689.	0.5	2
483	Rollout event-triggered control: reconciling event- and time-triggered control. Automatisierungstechnik, 2022, 70, 331-342.	0.4	2
484	Dynamic modeling and nonlinear model predictive control of a fluid catalytic cracking unit. Computer Aided Chemical Engineering, 2005, 20, 1363-1368.	0.3	1
485	An approach to linear control of nonlinear processes. Computer Aided Chemical Engineering, 2006, 21, 1299-1304.	0.3	1
486	Sensitivity analysis of programmed cell death and implications for crosstalk phenomena during Tumor Necrosis Factor stimulation. , 2006, , .		1

#	ARTICLE	IF	CITATIONS
487	A nonlinear synchronization scheme for polynomial systems. Proceedings of the American Control Conference, 2007, , .	0.0	1
488	Modelling and Analysis of Cell Death Signalling. , 2007, , 161-180.		1
489	&#x2113;<inf>&#x221E;</inf>-gain model reduction for discrete-time systems via LMIs. , 2009, , .		1
490	Moving horizon â„" 2 control of LPV systems subject to constraints * *The authors gratefully acknowledge funding by the German Research Foundation (AL 316/5-1) and the National Science Fund of China for Distinguished Young Scholar under grant No. 60725311. The work was partially supported by the Graduate School of the Stuttgart Research Centre for Simulation Technology (SimTech).. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 354-359.	0.4	1
491	Output Consensus Controller Design for Nonlinear Relative Degree One Multi-Agent Systems with Delays*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 370-375.	0.4	1
492	MPC with one free control action for constrained LPV systems. , 2010, , .		1
493	Generic bifurcations in the dynamics of biochemical networks. , 2010, , .		1
494	Approximative classification of regions in parameter spaces of nonlinear ODEs yielding different qualitative behavior. , 2010, , .		1
495	A linear multi-agent systems approach to diffusively coupled piecewise affine systems: Delay robustness. , 2011, , .		1
496	A Distributed Real-Time Algorithm for Preference-Based Agreement. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8933-8938.	0.4	1
497	Structural requirements and discrimination of cell differentiation networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11767-11772.	0.4	1
498	Structure estimation for unate Boolean models of gene regulation networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1725-1730.	0.4	1
499	Combinatorial insights and robustness analysis for clustering in dynamical networks. , 2012, , .		1
500	A Finite-Time Dual Method for Negotiation between Dynamical Systems. SIAM Journal on Control and Optimization, 2013, 51, 172-194.	1.1	1
501	Constrained stabilization of periodic discrete-time systems via periodic Lyapunov functions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 17-22.	0.4	1
502	Multistability equivalence between gene regulatory networks of different dimensionality. , 2013, , .		1
503	From non-cooperative to cooperative distributed MPC: A simplicial approximation perspective. , 2013, , .		1
504	Performance analysis of economic MPC with self-tuning terminal cost. , 2014, , .		1

#	Article	IF	Citations
505	Set-based Disturbance Attenuation in Economic Model Predictive Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1898-1903.	0.4	1
506	Approximate Predictive Control of Polytopic Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 11060-11066.	0.4	1
507	Robust economic model predictive control with linear average constraints. , 2014, , .		1
508	Yield-Analysis of Different Coupling Schemes for Interconnected Bio-Reactors. , 2015, , 384-391.		1
509	Navigation and obstacle avoidance via backstepping for mechanical systems with drift in the closed loop. , 2015, , .		1
510	Observer-based synchronization with relative measurements and unknown neighbour models. , 2016, , .		1
511	Input-output control of composite systems. , 2016, , .		1
512	On the moment dynamics of discrete measures. , 2016, , .		1
513	Persistence of Excitation and the Feedback Theorem for Passive Systems. IFAC-PapersOnLine, 2016, 49, 927-932.	0.5	1
514	State estimation of interconnected ensembles with anonymized outputs. IFAC-PapersOnLine, 2016, 49, 109-114.	0.5	1
515	Final-state constrained optimal control via a projection operator approach. , 2016, , .		1
516	New results on semi-explicit and almost explicit MPC algorithms. Automatisierungstechnik, 2017, 65, 245-259.	0.4	1
517	Systems with integral resource consumption. , 2017, , .		1
518	Transient performance of economic model predictive control with average constraints. , 2017, , .		1
519	Death patterns resulting from cell cycle-independent cell death.. IFAC-PapersOnLine, 2018, 51, 90-93.	0.5	1
520	Moment Dynamics of Zirconia Particle Formation for Optimizing Particle Size Distribution. Nanomaterials, 2019, 9, 333.	1.9	1
521	Graph topology and subsystem centrality in approximately dissipative system interconnections. , 2019, , .		1
522	Robustness Analysis of Biological Models. , 2021, , 1981-1986.		1

#	Article	IF	Citations
523	Global Uncertainty Analysis for a Model of TNF-Induced NF-κB Signalling. Lecture Notes in Control and Information Sciences, 2010, , 365-377.	0.6	1
524	Robust design of sparse relative sensing networks. , 2013, , .		1
525	Multi-agent Systems. , 2014, , 263-324.		1
526	Saving Tokens in Rollout Control with Token Bucket Specification. IFAC-PapersOnLine, 2020, 53, 2620-2627.	0.5	1
527	Uncertainties and Output Feedback in Rollout Event-Triggered Control. IEEE Transactions on Control of Network Systems, 2023, 10, 1195-1208.	2.4	1
528	Practically-motivated input sequences for nonlinear model identification. , 1998, , .		0
529	ON DERIVING A HYBRID MODEL FOR CARBOHYDRATE UPTAKE IN ESCHERICHIA COLI. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 19-24.	0.4	0
530	A SIMPLE SEPARATION RESULT FOR CONTROL AFFINE SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 1049-1054.	0.4	0
531	Flatness-based optimal noncausal output transitions for constrained nonlinear systems: case study on an isothermal continuously stirred tank reactor. IET Control Theory and Applications, 2005, 152, 105-112.	1.7	0
532	Theorie der Automatisierungstechnik. Automatisierungstechnik, 2007, 55, 256-259.	0.4	0
533	Live & let die - A systems biology view on cell death. Computer Aided Chemical Engineering, 2007, , 927-928.	0.3	0
534	OBSERVER DESIGN VIA ABSOLUTE STABILITY FOR A CLASS OF NONLINEAR DESCRIPTOR SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 438-443.	0.4	0
535	Understanding the process of force-induced bone growth and adaptation through a mathematical model. Bone, 2008, 42, S61.	1.4	0
536	Rückkopplungen im Leben und Sterben einer Zelle: Ansätze zur systemtheoretischen Analyse (Feedback) Tj ETQq0 0 0 rgBT /Overlock Automatisierungstechnik, 2008, 56, 233-240.	0.4	0
537	On Synchronous Steady States and Internal Models of Diffusively Coupled Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 1-10.	0.4	0
538	Synchronization conditions for Lyapunov oscillators. , 2010, , .		0
539	Observability properties of the periodic Toda lattice. , 2011, , .		0
540	Moving horizon H∞-control of constrained periodically time-varying systems*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10156-10161.	0.4	0

#	Article	IF	Citations
541	Steady state stability preserving nonlinear model reduction using sequential convex optimization. , 2011, , .		0
542	Model predictive control of switched nonlinear systems under average dwell-time. , 2011, , .		0
543	Terminal set of min-max model predictive control with guaranteed &#x2112;<inf>2</inf> performance. , 2012, , .		0
544	Eulerian consensus networks. , 2012, , .		0
545	On the Joint Design of the Controller, its Placement, and the Routing for Networked Control Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 240-246.	0.4	0
546	On the Optimization of the Transport Layer for Networked Control Systems. Automatisierungstechnik, 2013, 61, 495-505.	0.4	0
547	Increasing performance of parametrizations for linear MPC via application of a data mining algorithm. , 2014, , .		0
548	IEEE CSS Video Clip Contest 2014 [Technical Activities]. IEEE Control Systems, 2014, 34, 18-18.	1.0	0
549	Computation of piecewise affine terminal cost functions for model predictive control. , 2014, , .		0
550	Nonlinear MPC: the Impact of Sampling on Closed Loop Stability. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 911-912.	0.2	0
551	Updates on Technical Committees and Wikipedia [Technical Activities]. IEEE Control Systems, 2014, 34, 24-24.	1.0	0
552	Pinning Capital Stock and Gross Investment Rate in Competing Rationally Managed Firms. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 10719-10724.	0.4	0
553	Average Constraints in Robust Economic Model Predictive Controlâ—â—The authors would like to thank the German Research Foundation (DFG) for financial support of the project within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart.. IFAC-PapersOnLine, 2015, 48, 44-49.	0.5	0
554	A convex conic underestimate of Laplacian spectra and its application to network synthesis. , 2015, , .		0
555	An Update on the IEEE Control Systems Society Technical Activities Board [Technical Activities]. IEEE Control Systems, 2015, 35, 28-28.	1.0	0
556	A Lyapunov Function Approach to the Event-triggered Stabilization of the Minimal Robust Positively Invariant Set**The authors would like to thank the German Research Foundation (DFG) for financial support within the Cluster of Excellence in Simulation Technology (EXC 310/2) at the University of Stuttgart. The authors would also like to thank the DFG for their financial support within the research grant AL 316/9-1.. IFAC-PapersOnLine, 2016, 49, 25-30.	0.5	0
557	Robust steady state optimization for polytopic systems. , 2016, , .		0
558	IFAC gratuliert Boppard: Glückwünsche einer 60-Jährigen an einen 50-Jährigen. Automatisierungstechnik, 2016, 64, 162-163.	0.4	0

#	Article	IF	Citations
559	Verteilte Ausgangsregelung von Multiagentensystemen mit gekoppelten Messgrößen. Automatisierungstechnik, 2016, 64, 645-657.	0.4	0
560	Multistability equivalence between gene regulatory networks of different dimensionality with application to a differentiation network. International Journal of Robust and Nonlinear Control, 2016, 26, 4148-4168.	2.1	0
561	An Input–Output Framework for Submanifold Stabilization. IEEE Transactions on Automatic Control, 2017, 62, 5170-5184.	3.6	0
562	Periodic Signal Compressors. IFAC-PapersOnLine, 2017, 50, 6465-6470.	0.5	0
563	The circuit-breaking algorithm for monotone systems. Mathematical Biosciences, 2017, 284, 80-91.	0.9	0
564	Separable matrices and minimum complexity controllers. , 2017, , .		0
565	Ensemble control for cell cycle synchronization of heterogeneous cell populations. IFAC-PapersOnLine, 2018, 51, 44-47.	0.5	0
566	Event-based Containability for Linear Systems with Arbitrarily Small Bit Rates. IFAC-PapersOnLine, 2019, 52, 31-36.	0.5	0
567	Individual-based modeling explains effects of TRAIL treatment in cancer cells.. IFAC-PapersOnLine, 2019, 52, 207-212.	0.5	0
568	H ∞-Regelung von zeitdiskreten Deskriptorsystemen (H ∞ Control of Discrete-Time Descriptor) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	0.4	0
569	Fault Diagnosis Of Constrained Nonlinear Systems Using Structured Augmented State Models. , 2007, , 1300-1305.		0
570	The transcritical bifurcation in absolutely stable feedback systems. , 2009, , .		0
571	Probabilistic H-norm estimation via Gaussian process system identification. IFAC-PapersOnLine, 2020, 53, 431-436.	0.5	0
572	A Dissipation Inequality for the Minimum Phase Property of Nonlinear Control Systems. , 2007, , 71-83.		0
573	Nonlinear Synchronization of Coupled Oscillators: The Polynomial Case. , 2008, , 339-351.		0