Teodoro Alamo

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Restart of Accelerated First-Order Methods With Linear Convergence Under a Quadratic Functional Growth Condition. IEEE Transactions on Automatic Control, 2023, 68, 612-619. | 5.7 | 0 |
| 2 | Challenges and Future Directions in Pandemic Control. , 2022, 6, 722-727. | | 13 |
| 3 | Prediction Error Quantification Through Probabilistic Scaling. , 2022, 6, 1118-1123. | | 6 |
| 4 | Probabilistically Certified Management of Data Centers Using Predictive Control. IEEE Transactions on Automation Science and Engineering, 2022, 19, 2849-2861. | 5.2 | 2 |
| 5 | Harmonic Based Model Predictive Control for Set-Point Tracking. IEEE Transactions on Automatic Control, 2022, 67, 48-62. | 5.7 | 3 |
| 6 | Implementation of Model Predictive Control for Tracking in Embedded Systems Using a Sparse Extended ADMM Algorithm. IEEE Transactions on Control Systems Technology, 2022, 30, 1798-1805. | 5.2 | 3 |
| 7 | Chance-constrained sets approximation: A probabilistic scaling approach. Automatica, 2022, 137, 110108. | 5.0 | 4 |
| 8 | State-Space Kriging: A Data-Driven Method to Forecast Nonlinear Dynamical Systems. , 2022, 6, 2258-2263. | | 6 |
| 9 | Tractable robust MPC design based on nominal predictions. Journal of Process Control, 2022, 111, 75-85. | 3.3 | 2 |
| 10 | Receding Horizon Optimization of Large Trade Orders. IEEE Access, 2021, 9, 63865-63875. | 4.2 | 2 |
| 11 | Tracking Model Predictive Control. , 2021, , 2336-2345. | | 4 |
| 12 | Implementation of Model Predictive Control in Programmable Logic Controllers. IEEE Transactions on Control Systems Technology, 2021, 29, 1117-1130. | 5.2 | 14 |
| 13 | Data-driven methods for present and future pandemics: Monitoring, modelling and managing. Annual Reviews in Control, 2021, 52, 448-464. | 7.9 | 28 |
| 14 | Probabilistic performance validation of deep learningâ€based robust NMPC controllers. International Journal of Robust and Nonlinear Control, 2021, 31, 8855-8876. | 3.7 | 20 |
| 15 | Probabilistic reachable and invariant sets for linear systems with correlated disturbance. Automatica, 2021, 132, 109808. | 5.0 | 4 |
| 16 | Stock Forecasting Using Local Data. IEEE Access, 2021, 9, 9334-9344. | 4.2 | 11 |
| 17 | Probabilistic interval predictor based on dissimilarity functions. IEEE Transactions on Automatic Control, 2021, , 1-1. | 5.7 | 1 |
| 18 | Real-time implementation of MPC for tracking in embedded systems: Application to a two-wheeled inverted pendulum. , 2021, , . | | 1 |

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| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Predictive control of a water distribution system based on process historian data. Optimal Control Applications and Methods, 2020, 41, 571-586. | 2.1 | 8 |
| 20 | Computationally efficient stochastic MPC: a probabilistic scaling approach. , 2020, , . | | 6 |
| 21 | Guaranteed set-membership state estimation of an octorotor's position for radar applications. International Journal of Control, 2020, 93, 2760-2770. | 1.9 | 8 |
| 22 | Covid-19: Open-Data Resources for Monitoring, Modeling, and Forecasting the Epidemic. Electronics (Switzerland), 2020, 9, 827. | 3.1 | 74 |
| 23 | A probabilistic validation approach for penalty function design in Stochastic Model Predictive Control. IFAC-PapersOnLine, 2020, 53, 11271-11276. | 0.9 | 3 |
| 24 | Tracking Model Predictive Control. , 2020, , 1-10. | | 0 |
| 25 | Restart FISTA with Global Linear Convergence. , 2019, , . | | 9 |
| 26 | Gradient Based Restart FISTA. , 2019, , . | | 4 |
| 27 | Single harmonic based Model Predictive Control for tracking. , 2019, , . | | 4 |
| 28 | Offset free data driven control: application to a process control trainer. IET Control Theory and Applications, 2019, 13, 3096-3106. | 2.1 | 11 |
| 29 | Data Driven Control: An Offset Free Approach. , 2019, , . | | 6 |
| 30 | Safe approximations of chance constrained sets by probabilistic scaling. , 2019, , . | | 5 |
| 31 | Ellipsoidal set-membership state estimation for descriptor systems. , 2019, , . | | 6 |
| 32 | Nonlinear MPC for Tracking Piece-Wise Constant Reference Signals. IEEE Transactions on Automatic Control, 2018, 63, 3735-3750. | 5.7 | 104 |
| 33 | Model predictive control of partially fading memory systems with binary inputs. Journal of Process Control, 2018, 64, 141-151. | 3.3 | 4 |
| 34 | A Distributed Set-membership Approach based on Zonotopes for Interconnected Systems. , 2018, , . | | 9 |
| 35 | Zonotopic Constrained Kalman Filter Based on a Dual Formulation. , 2018, , . | | 3 |
| 36 | Historian Data Based Predictive Control of a Water Distribution Network. , 2018, , . | | 3 |

| # | Article | IF | CITATIONS |
|----|---|----------|----------------------------|
| 37 | Data-based predictive control via direct weight optimization. IFAC-PapersOnLine, 2018, 51, 356-361. | 0.9 | 26 |
| 38 | Robust Design Through Probabilistic Maximization. Systems and Control: Foundations and Applications, 2018, , 247-274. | 0.3 | 4 |
| 39 | Implementation of Model Predictive Controllers in Programmable Logic Controllers using IEC 61131-3 standard. , 2018, , . | | 12 |
| 40 | Economic Model Predictive Control with Nonlinear Constraint Relaxation for the Operational Management of Water Distribution Networks. Energies, 2018, 11, 991. | 3.1 | 14 |
| 41 | Interval Predictor based on Supporting Hyperplanes. , 2018, , . | | 0 |
| 42 | Networked control design for coalitional schemes using game-theoretic methods. Automatica, 2017, 78, 320-332. | 5.0 | 40 |
| 43 | Robust Model Predictive Controller for Tracking Changing Periodic Signals. IEEE Transactions on Automatic Control, 2017, 62, 5343-5350. | 5.7 | 20 |
| 44 | A General Framework for Predictors Based on Bounding Techniques and Local Approximation. IEEE Transactions on Automatic Control, 2017, 62, 3430-3435. | 5.7 | 29 |
| 45 | Predictive Control with On-Off actuators of Partially Fading Memory Systems. IFAC-PapersOnLine, 2017, 50, 7187-7192. | 0.9 | 0 |
| 46 | Distributed Zonotopic Set-Membership State Estimation based on Optimization Methods with Partial Projection * *This work has been partially funded by the Spanish Government and FEDER through the projects CICYT ECOCIS (ref. DPI2013-48243), CICYT HARCRICS (ref. DPI2014-58104-R) and CICYT DEOCS (ref.) | Tj ETQq0 | 0 0 ⁶ rgBT /Ove |
| 47 | Fault tolerant control approach based on multiple models and set-membership state estimation. , 2016, , . | | 3 |
| 48 | Application to a large-scale drinking water network of robust MPC for tracking periodic references. , 2016, , . | | 2 |
| 49 | Guaranteed state estimation and fault detection based on zonotopes for differential-algebraic-equation systems. , 2016, , . | | 6 |
| 50 | Robust model predictive controller for tracking periodic signals. , 2016, , . | | 3 |
| 51 | Setâ€membership methods applied to FDI and FTC. International Journal of Adaptive Control and Signal Processing, 2016, 30, 150-153. | 4.1 | 6 |
| 52 | Application to a drinking water network of robust periodic MPC. Control Engineering Practice, 2016, 57, 50-60. | 5.5 | 14 |
| 53 | Periodic economic model predictive control with nonlinear-constraint relaxation for water distribution networks. , 2016, , . | | 3 |
| 54 | MPC for Tracking Periodic References. IEEE Transactions on Automatic Control, 2016, 61, 1123-1128. | 5.7 | 64 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Slide Window Bounded-Error Time-Varying Systems Identification. IEEE Transactions on Automatic Control, 2016, 61, 2282-2287. | 5.7 | 17 |
| 56 | Combined Stochastic and Deterministic Interval Predictorâ^—â^—This research has been supported by DPI2012-33309 and DPI2013-48243-C2-2-R of Ministerio de EconomÃa y Competitividad (Spain) IFAC-PapersOnLine, 2015, 48, 320-325. | 0.9 | 0 |
| 57 | A convex approach for NMPC based on second order Volterra series models. International Journal of Robust and Nonlinear Control, 2015, 25, 3546-3571. | 3.7 | 7 |
| 58 | Periodic Economic Control of a Nonisolated Microgrid. IEEE Transactions on Industrial Electronics, 2015, 62, 5247-5255. | 7.9 | 64 |
| 59 | Combined stochastic and deterministic interval predictor for time-varying systems. , 2015, , . | | 1 |
| 60 | Interval predictor based on a Reversed Huber's error function. , 2015, , . | | 0 |
| 61 | MPC implementation in a PLC based on Nesterov's fast gradient method. , 2015, , . | | 6 |
| 62 | An algorithm with low computational requirements to constrain the Shapley value in coalitional networks. , 2015, , . | | 3 |
| 63 | Application of Periodic Economic MPC to a Grid-Connected Micro-Grid**The financial support from Ministerio de EconomÃa y Competitividad (Project No. DPI2013-48243-C2-2-R) is gratefully acknowledged IFAC-PapersOnLine, 2015, 48, 513-518. | 0.9 | 7 |
| 64 | Randomized methods for design of uncertain systems: Sample complexity and sequential algorithms. Automatica, 2015, 52, 160-172. | 5.0 | 115 |
| 65 | Sensor fault detection and diagnosis using zonotopic set-membership estimation. , 2014, , . | | 8 |
| 66 | Ellipsoidal state estimation for systems with interval uncertainties. , 2014, , . | | 8 |
| 67 | Constraints on the shapley value for a coalitional control system. , 2014, , . | | 11 |
| 68 | Robust predictor for nonlinear systems based on bounding-error methods. , 2014, , . | | 0 |
| 69 | Improved set-membership estimation approach based on zonotopes and ellipsoids. , 2014, , . | | 31 |
| 70 | A gradient-based strategy for the one-layer RTO+MPC controller. Journal of Process Control, 2014, 24, 435-447. | 3.3 | 29 |
| 71 | Single-layer economic model predictive control for periodic operation. Journal of Process Control, 2014, 24, 1207-1224. | 3.3 | 70 |
| 72 | A New Approach for Guaranteed Ellipsoidal State Estimation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6533-6538 | 0.4 | 23 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | An Iterative Design Method for Coalitional Control Networks with Constraints on the Shapley Value. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1188-1193. | 0.4 | 19 |
| 74 | Zonotopic guaranteed state estimation for uncertain systems. Automatica, 2013, 49, 3418-3424. | 5.0 | 156 |
| 75 | Zonotope-based set-membership estimation for Multi-Output uncertain systems. , 2013, , . | | 22 |
| 76 | Computationally efficient nonlinear Min–Max Model Predictive Control based on Volterra series models—Application to a pilot plant. Journal of Process Control, 2013, 23, 543-560. | 3.3 | 28 |
| 77 | Economic model predictive control of a smartgrid with hydrogen storage and PEM fuel cell. , 2013, , . | | 12 |
| 78 | Tracking Model Predictive Control. , 2013, , 1-12. | | 0 |
| 79 | Integrating the RTO in the MPC: An adaptive gradient-based approach. , 2013, , . | | 5 |
| 80 | Zonotopic set-membership estimation for interval dynamic systems. , 2012, , . | | 11 |
| 81 | Oracle based approach to admissible invariant sets. , 2012, , . | | Ο |
| 82 | A Polynomial Matrix Inequality approach for zonotopic set-membership estimation of multivariable systems. , 2012, , . | | 1 |
| 83 | A gradient-based strategy for integrating Real Time Optimizer (RTO) with Model Predictive Control (MPC). IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 33-38. | 0.4 | 6 |
| 84 | Model Predictive Control for changing economic targets. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 384-391. | 0.4 | 9 |
| 85 | MPC for tracking periodic reference signals. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 490-495. | 0.4 | 21 |
| 86 | Design and Application of Suboptimal Mixed \$H_{2}/H_{infty}\$ Controllers for Networked Control Systems. IEEE Transactions on Control Systems Technology, 2012, 20, 1057-1065. | 5.2 | 27 |
| 87 | Robust semidefinite programming problems with general nonlinear parameter dependence: Approaches using the DC-representations. Automatica, 2012, 48, 2937-2944. | 5.0 | Ο |
| 88 | Randomized control design through probabilistic validation. , 2012, , . | | 8 |
| 89 | A probabilistic approach for testing feedback controllers with application to congestion control. International Journal of Control, Automation and Systems, 2012, 10, 835-840. | 2.7 | 0 |
| 90 | Análisis y minimización del riesgo de rotura de stock aplicado a la gestión en farmacia hospitalaria. Farmacia Hospitalaria, 2012, 36, 130-134. | 0.6 | 2 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | On the explicit dead-time compensation for robust model predictive control. Journal of Process Control, 2012, 22, 236-246. | 3.3 | 26 |
| 92 | Invariant sets computation for convex difference inclusions systems. Systems and Control Letters, 2012, 61, 819-826. | 2.3 | 22 |
| 93 | Commande prédictive robuste par des techniques d'observateurs basées sur des ensembles zonotopiques. Journal Europeen Des Systemes Automatises, 2012, 46, 235-250. | 0.4 | 2 |
| 94 | Online robust tube-based MPC for time-varying systems: a practical approach. International Journal of Control, 2011, 84, 1157-1170. | 1.9 | 72 |
| 95 | Robust tube-based constrained predictive control via zonotopic set-membership estimation. , 2011, , . | | 12 |
| 96 | Robust Semidefinite Programming Problems with General Nonlinear Parameter Dependence: Application of the DC-Representations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 7939-7944. | 0.4 | 0 |
| 97 | A New Approach for Guaranteed State Estimation by Zonotopes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9242-9247. | 0.4 | 10 |
| 98 | Computational burden reduction in min–max MPC. Journal of the Franklin Institute, 2011, 348, 2430-2447. | 3.4 | 15 |
| 99 | Robust tube-based predictive control for mobile robots in off-road conditions. Robotics and Autonomous Systems, 2011, 59, 711-726. | 5.1 | 47 |
| 100 | Ultimate bounded stability and stabilization of linear systems interconnected with generalized saturated functions. Automatica, 2011, 47, 1473-1481. | 5.0 | 19 |
| 101 | Min–Max MPC based on an upper bound of the worst case cost with guaranteed stability. Application to a pilot plant. Journal of Process Control, 2011, 21, 194-204. | 3.3 | 16 |
| 102 | Distributed model predictive control based on agent negotiation. Journal of Process Control, 2011, 21, 685-697. | 3.3 | 112 |
| 103 | Optimal MPC for tracking of constrained linear systems. International Journal of Systems Science, 2011, 42, 1265-1276. | 5.5 | 27 |
| 104 | Enhanced robust NMPC based on nominal predictions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 220-225. | 0.4 | 5 |
| 105 | Randomized Algorithms and their application to renewable energy systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 163-168. | 0.4 | 0 |
| 106 | Model predictive control techniques for hybrid systems. Annual Reviews in Control, 2010, 34, 21-31. | 7.9 | 126 |
| 107 | On the computation of convex robust control invariant sets for nonlinear systems. Automatica, 2010, 46, 1334-1338. | 5.0 | 63 |
| 108 | Robust tube-based MPC for tracking of constrained linear systems with additive disturbances. Journal of Process Control, 2010, 20, 248-260. | 3.3 | 208 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | A convex approach for NMPC based on second order Volterra series models. , 2010, , . | | Ο |
| 110 | Enhanced ISS nominal MPC based on constraint tightening for constrained linear systems. , 2010, , . | | 11 |
| 111 | Robust tube based model predictive control for constrained systems with dead-time. , 2010, , . | | 1 |
| 112 | Adaptive Control for a Mobile Robot Under Slip Conditions Using an LMI-Based Approach. European Journal of Control, 2010, 16, 144-155. | 2.6 | 43 |
| 113 | Fault-tolerant model predictive control. , 2010, , . | | 22 |
| 114 | Modeling of a hybrid renewable/fossil hot water production system. , 2010, , . | | 0 |
| 115 | On the sample complexity of randomized approaches to the analysis and design under uncertainty. , 2010, , . | | 46 |
| 116 | On the Sample Complexity of Probabilistic Analysis and Design Methods. Lecture Notes in Control and Information Sciences, 2010, , 39-50. | 1.0 | 22 |
| 117 | Dynamic model of the relationships between technology and employment. , 2009, , . | | 0 |
| 118 | MPC for tracking of constrained nonlinear systems. , 2009, , . | | 43 |
| 119 | Robust fault detection using zonotopeâ€based setâ€membership consistency test. International Journal of Adaptive Control and Signal Processing, 2009, 23, 311-330. | 4.1 | 92 |
| 120 | Control of a pilot plant using QP based min–max predictive control. Control Engineering Practice, 2009, 17, 1358-1366. | 5.5 | 15 |
| 121 | A robust constrained reference governor approach using linear matrix inequalities. Journal of Process Control, 2009, 19, 773-784. | 3.3 | 11 |
| 122 | Convex invariant sets for discrete-time Lur'e systems. Automatica, 2009, 45, 1066-1071. | 5.0 | 31 |
| 123 | MPC for tracking with optimal closed-loop performance. Automatica, 2009, 45, 1975-1978. | 5.0 | 118 |
| 124 | Randomized Strategies for Probabilistic Solutions of Uncertain Feasibility and Optimization Problems. IEEE Transactions on Automatic Control, 2009, 54, 2545-2559. | 5.7 | 151 |
| 125 | Robust tube-based MPC for constrained mobile robots under slip conditions. , 2009, , . | | 12 |
| 126 | Input-to-State Stability: A Unifying Framework for Robust Model Predictive Control. Lecture Notes in Control and Information Sciences, 2009, , 1-26. | 1.0 | 115 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Control of Constrained Discrete-Time Systems With Bounded \$ell_{2}\$ Gain. IEEE Transactions on Automatic Control, 2009, 54, 1105-1111. | 5.7 | 22 |
| 128 | Model Predictive Control techniques for Hybrid Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1-13. | 0.4 | 2 |
| 129 | Further Results on "Robust MPC Using Linear Matrix Inequalitiesâ€, Lecture Notes in Control and Information Sciences, 2009, , 89-98. | 1.0 | 8 |
| 130 | MPC for Tracking of Constrained Nonlinear Systems. Lecture Notes in Control and Information Sciences, 2009, , 315-323. | 1.0 | 8 |
| 131 | Nonlinear Min-Max Model Predictive Control based on Volterra models. Application to a pilot plant. , 2009, , . | | 0 |
| 132 | Safety verification and adaptive model predictive control of the hybrid dynamics of a fuel cell system. International Journal of Adaptive Control and Signal Processing, 2008, 22, 142-160. | 4.1 | 13 |
| 133 | MPC for tracking piecewise constant references for constrained linear systems. Automatica, 2008, 44, 2382-2387. | 5.0 | 392 |
| 134 | On input-to-state stability of min–max nonlinear model predictive control. Systems and Control Letters, 2008, 57, 39-48. | 2.3 | 134 |
| 135 | Min–Max MPC based on a network problem. Systems and Control Letters, 2008, 57, 184-192. | 2.3 | 10 |
| 136 | A new vertex result for robustness problems with interval matrix uncertainty. Systems and Control Letters, 2008, 57, 474-481. | 2.3 | 49 |
| 137 | A set-membership state estimation algorithm based on DC programming. Automatica, 2008, 44, 216-224. | 5.0 | 74 |
| 138 | An algorithm for bounded-error identification of nonlinear systems based on DC functions. Automatica, 2008, 44, 437-444. | 5.0 | 17 |
| 139 | Robust tubed-based MPC for tracking applied to the quadruple-tank process. , 2008, , . | | 2 |
| 140 | Dynamic Output Feedback for Discrete-Time Systems Under Amplitude and Rate Actuator Constraints. IEEE Transactions on Automatic Control, 2008, 53, 2367-2372. | 5.7 | 47 |
| 141 | Min-Max predictive control of a pilot plant using a QP approach. , 2008, , . | | 0 |
| 142 | Min-Max Model Predictive Control of a pilot plant. , 2008, , . | | 6 |
| 143 | An Efficient Maximization Algorithm With Implications in Min-Max Predictive Control. IEEE Transactions on Automatic Control, 2008, 53, 2192-2197. | 5.7 | 10 |
| | | | |

144 MPC for tracking with optimal closed-loop performance. , 2008, , .

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| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Design of ISS-Lyapunov Functions for Discrete-Time Linear Uncertain Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1135-1140. | 0.4 | 2 |
| 146 | On the design of Robust tube-based MPC for tracking. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15333-15338. | 0.4 | 25 |
| 147 | Robust control of the distributed solar collector field ACUREX using MPC for tracking IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 958-963. | 0.4 | 15 |
| 148 | Revisiting statistical learning theory for uncertain feasibility and optimization problems. , 2007, , . | | 7 |
| 149 | Piecewise Affine Model of a Fuel Cell for Safety Verification. Proceedings of the American Control Conference, 2007, , . | 0.0 | 1 |
| 150 | A convex approximation of the feasible solution set for nonlinear bounded-error identification problems. , 2007, , . | | 1 |
| 151 | Improved sample size bounds for probabilistic robust control design: A pack-based strategy. , 2007, , . | | 11 |
| 152 | New Methods for Computing the Terminal Cost for Min-max Model Predictive Control. Proceedings of the American Control Conference, 2007, , . | 0.0 | 1 |
| 153 | On the computation of local invariant sets for nonlinear systems. , 2007, , . | | 9 |
| 154 | Robust tube based MPC for tracking of piece-wise constant references. , 2007, , . | | 20 |
| 155 | Min–max model predictive control as a quadratic program. IET Control Theory and Applications, 2007, 1, 328-333. | 2.1 | 22 |
| 156 | Towards the practical implementation of min-max nonlinear Model Predictive Control. , 2007, , . | | 9 |
| 157 | Adaptive Model Predictive Control of the Hybrid Dynamics of a Fuel Cell System. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , . | 0.0 | 3 |
| 158 | Discussion on: "GPC Robust Design Using Linear and/or Bilinear Matrix Inequalities― European Journal of Control, 2007, 13, 470-472. | 2.6 | 1 |
| 159 | Output feedback Robust tube based MPC for tracking of piece-wise constant references. , 2007, , . | | 22 |
| 160 | Robust GPC-QFT approach using Linear Matrix Inequalities. , 2007, , . | | 1 |
| 161 | Min–max MPC using a tractable QP problem. Automatica, 2007, 43, 693-700. | 5.0 | 26 |

162 On the Computation of Robust Control Invariant Sets for Piecewise Affine Systems. , 2007, , 131-139.

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Interval Arithmetic in Robust Nonlinear MPC. , 2007, , 317-326. | | 6 |
| 164 | A sequentially optimal randomized algorithm for robust LMI feasibility problems. , 2007, , . | | 14 |
| 165 | Robust Fault Detection Based on Zonotope-Based Set-Membership Parameter Consistency Test. , 2007, , 1056-1061. | | 0 |
| 166 | Output Feedback for Discrete-Time Systems with Amplitude and Rate Constrained Actuators. Lecture Notes in Control and Information Sciences, 2007, , 369-396. | 1.0 | 2 |
| 167 | Discussion on: GPC Robust Design Using Linear and/or Bilinear Matrix Inequalities. European Journal of Control, 2007, 13, 468-472. | 2.6 | 1 |
| 168 | Bounded Error Identification of Systems With Time-Varying Parameters. IEEE Transactions on Automatic Control, 2006, 51, 1144-1150. | 5.7 | 103 |
| 169 | Feedback min-max model predictive control based on a quadratic cost function. , 2006, , . | | 9 |
| 170 | A Decomposition Algorithm for Feedback Min–Max Model Predictive Control. IEEE Transactions on Automatic Control, 2006, 51, 1688-1692. | 5.7 | 21 |
| 171 | On the Stability of Constrained MPC Without Terminal Constraint. IEEE Transactions on Automatic Control, 2006, 51, 832-836. | 5.7 | 156 |
| 172 | INTRODUCING LINEAR MATRIX INEQUALITIES IN A CONTROL COURSE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 205-210. | 0.4 | 13 |
| 173 | A PREDICTION APPROACH TO INTRODUCE DEAD-TIME PROCESS CONTROL IN A BASIC CONTROL COURSE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 211-216. | 0.4 | 1 |
| 174 | A JAVA BASED SIMULATOR FOR BASIC CONTROL EDUCATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 481-486. | 0.4 | 1 |
| 175 | SMALL-SCALE DOMOTIC SYSTEM AS PROTOTYPE OF REMOTE CYBERNETIC APPLICATIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 499-504. | 0.4 | 0 |
| 176 | SYNTHESIS OF ROBUST SATURATED CONTROLLERS: AN SNS-APPROACH. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 477-482. | 0.4 | 5 |
| 177 | ROBUST FAULT DETECTION BASED ON ZONOTOPE-BASED SET-MEMBERSHIP PARAMETER CONSISTENCY TEST. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1056-1061. | 0.4 | 1 |
| 178 | AN EDUCATIONAL PLANT BASED ON THE QUADRUPLE-TANK PROCESS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 82-87. | 0.4 | 15 |
| 179 | Input to state stability of min–max MPC controllers for nonlinear systems with bounded uncertainties. Automatica, 2006, 42, 797-803. | 5.0 | 182 |
| 180 | A new concept of invariance for saturated systems. Automatica, 2006, 42, 1515-1521. | 5.0 | 44 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Robust MPC of constrained discrete-time nonlinear systems based on approximated reachable sets. Automatica, 2006, 42, 1745-1751. | 5.0 | 90 |
| 182 | Min-Max MPC based on a computationally efficient upper bound of the worst case cost. Journal of Process Control, 2006, 16, 511-519. | 3.3 | 39 |
| 183 | Explicit solution of min–max MPC with additive uncertainties and quadratic criterion. Systems and Control Letters, 2006, 55, 266-274. | 2.3 | 22 |
| 184 | Estimation of the domain of attraction for saturated discrete-time systems. International Journal of Systems Science, 2006, 37, 575-583. | 5.5 | 31 |
| 185 | Predictive control of a Linear Motor for tracking of constant references. , 2006, , . | | 7 |
| 186 | COMPUTATIONALLY EFFICIENT MIN-MAX MPC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 462-467. | 0.4 | 1 |
| 187 | MPC FOR TRACKING OF PIECE-WISE CONSTANT REFERENCES FOR CONSTRAINED LINEAR SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 135-140. | 0.4 | 33 |
| 188 | Guaranteed state estimation by zonotopes. Automatica, 2005, 41, 1035-1043. | 5.0 | 492 |
| 189 | On the computation of invariant sets for constrained nonlinear systems: An interval arithmetic approach. Automatica, 2005, 41, 1583-1589. | 5.0 | 71 |
| 190 | Efficient implementation of constrained min–max model predictive control with bounded uncertainties: a vertex rejection approach. Journal of Process Control, 2005, 15, 149-158. | 3.3 | 30 |
| 191 | Enlarging the domain of attraction of MPC controllers. Automatica, 2005, 41, 629-635. | 5.0 | 93 |
| 192 | Robust MPC of constrained nonlinear systems based on interval arithmetic. IET Control Theory and Applications, 2005, 152, 325-332. | 1.7 | 71 |
| 193 | Application of an explicit min-max MPC to a scaled laboratory process. Control Engineering Practice, 2005, 13, 1463-1471. | 5.5 | 19 |
| 194 | Constrained min-max predictive control: modifications of the objective function leading to polynomial complexity. IEEE Transactions on Automatic Control, 2005, 50, 710-714. | 5.7 | 45 |
| 195 | Improved MPC Design based on Saturating Control Laws*. European Journal of Control, 2005, 11, 112-122. | 2.6 | 13 |
| 196 | A convex parameterization for solving constrained min-max problems with a quadratic cost. , 2004, , . | | 10 |
| 197 | A dynamic programming approach for determining the explicit solution of linear MPC controllers. , 2004, , . | | 14 |
| | | | |

Bounded error identification of systems with time-varying parameters. , 2004, , .

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| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Computation of polyhedral H-invariant sets for saturated systems. , 2004, , . | | 9 |
| 200 | An efficient maximization algorithm with implications in min-max predictive control. , 2003, , . | | 2 |
| 201 | Robust MPC of constrained discrete-time nonlinear systems based on zonotopes. , 2003, , . | | 4 |
| 202 | On the computation of invariant sets for constrained nonlinear systems: An interval arithmetic approach. , 2003, , . | | 3 |
| 203 | Improved MPC design based on saturating control laws. , 2003, , . | | 2 |
| 204 | ENLARGING THE DOMAIN OF ATTRACTION OF MPC CONTROLLER USING INVARIANT SETS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 47-52. | 0.4 | 5 |
| 205 | Robust stability and structured uncertainty bounded by the Euclidean norm. International Journal of Robust and Nonlinear Control, 2001, 11, 749-770. | 3.7 | 1 |
| 206 | Using Rprop for on-line learning of inverse dynamics. , 2001, , . | | 0 |
| 207 | Determining limit cycles in fuzzy control systems. , 0, , . | | 26 |
| 208 | Robust MPC of constrained discrete-time nonlinear systems based on uncertain evolution sets: application to a CSTR model. , 0, , . | | 8 |
| 209 | Efficient implementation of constrained min-max model predictive control with bounded uncertainties. , 0, , . | | 12 |
| 210 | Stability analysis of systems with bounded additive uncertainties based on invariant sets: Stability and feasibility of MPC. , 0, , . | | 23 |
| 211 | Input-to-state stable MPC for constrained discrete-time nonlinear systems with bounded additive uncertainties. , 0, , . | | 145 |
| 212 | Efficient implementation of min-max model predictive control with bounded uncertainties. , 0, , . | | 2 |
| 213 | Stable constrained MPC without terminal constraint. , 0, , . | | 18 |
| 214 | Guaranteed state estimation by zonotopes. , 0, , . | | 39 |
| 215 | An off line algorithm for reducing the computational burden of a MPC min max controller. , 0, , . | | 1 |
| | | | |

216 Constrained min-max predictive control: a polynomial-time approach. , 0, , .

| # | Article | IF | CITATIONS |
|-----|--|----|-----------|
| 217 | Min max MPC based on a graph problem. , 0, , . | | 4 |
| 218 | Robust MPC control based on a contractive sequence of sets. , 0, , . | | 8 |
| 219 | Robust Fault Diagnosis using Parallelotope-based Set-membership Consistency Tests. , 0, , . | | 15 |
| 220 | Dynamic Output Feedback for Discrete-Time Systems under Amplitude and Rate Actuator Constraints. , 0, , . | | 8 |
| 221 | Min-Max MPC using a tractable QP Problem. , 0, , . | | 2 |
| 222 | A Decomposition Algorithm for Feedback Min-Max Model Predictive Control. , 0, , . | | 5 |
| 223 | Stochastic Programming Applied to Model Predictive Control. , 0, , . | | 64 |
| 224 | Improved computation of ellipsoidal invariant sets for saturated control systems. , 0, , . | | 61 |