# Mark R Cannon

## List of Publications by Citations

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|---|---|---|---|
| 139 papers | 2,702 citations | 29 h-index | 48 g-index |
| 152 ext. papers | 3,335 ext. citations | 3.8 avg, IF | 5.59 L-index |

| # | Paper | IF | Citations |
|---|-------|-----|-----------|
| 139 | *. IEEE Transactions on Automatic Control*, **2011**, 56, 194-200 | 5.9 | 128 |
| 138 | Model Predictive Control **2016**, | | 122 |
| 137 | Explicit use of probabilistic distributions in linear predictive control. *Automatica*, **2010**, 46, 1719-1724 | 5.7 | 117 |
| 136 | Probabilistic Constrained MPC for Multiplicative and Additive Stochastic Uncertainty. *IEEE Transactions on Automatic Control*, **2009**, 54, 1626-1632 | 5.9 | 103 |
| 135 | Homothetic tube model predictive control. *Automatica*, **2012**, 48, 1631-1638 | 5.7 | 96 |
| 134 | Parameterized Tube Model Predictive Control. *IEEE Transactions on Automatic Control*, **2012**, 57, 2746-2761 | 5.9 | 91 |
| 133 | Space-frequency localized basis function networks for nonlinear system estimation and control. *Neurocomputing*, **1995**, 9, 293-342 | 5.4 | 90 |
| 132 | Efficient nonlinear model predictive control algorithms. *Annual Reviews in Control*, **2004**, 28, 229-237 | 10.3 | 81 |
| 131 | Who needs QP for linear MPC anyway?. *Automatica*, **2002**, 38, 879-884 | 5.7 | 79 |
| 130 | Optimizing prediction dynamics for robust MPC. *IEEE Transactions on Automatic Control*, **2005**, 50, 1892-1897 | 5.9 | 78 |
| 129 | Model predictive control for systems with stochastic multiplicative uncertainty and probabilistic constraints. *Automatica*, **2009**, 45, 167-172 | 5.7 | 72 |
| 128 | Nonlinear model predictive control with polytopic invariant sets. *Automatica*, **2003**, 39, 1487-1494 | 5.7 | 68 |
| 127 | Stochastic MPC with inequality stability constraints. *Automatica*, **2006**, 42, 2169-2174 | 5.7 | 59 |
| 126 | Robust Tube MPC for Linear Systems With Multiplicative Uncertainty. *IEEE Transactions on Automatic Control*, **2015**, 60, 1087-1092 | 5.9 | 55 |
| 125 | Constrained receding horizon predictive control for nonlinear systems. *Automatica*, **2002**, 38, 2093-2102 | 5.7 | 54 |
| 124 | Robust MPC with recursive model update. *Automatica*, **2019**, 103, 461-471 | 5.7 | 51 |
| 123 | Stochastic tube MPC with state estimation. *Automatica*, **2012**, 48, 536-541 | 5.7 | 50 |

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|---|---|---|---|
| 122 | Gaming strategy for electric power with random demand. *IEEE Transactions on Power Systems*, **2005**, 20, 1283-1292 | 7 | 49 |
| 121 | General interpolation in MPC and its advantages. *IEEE Transactions on Automatic Control*, **2003**, 48, 1092-1096 | 5.9 | 49 |
| 120 | Probabilistic tubes in linear stochastic model predictive control. *Systems and Control Letters*, **2009**, 58, 747-753 | 2.4 | 46 |
| 119 | Non-linear model based predictive control. *International Journal of Control*, **1999**, 72, 919-928 | 1.5 | 45 |
| 118 | Robust MPC Tower Damping for Variable Speed Wind Turbines. *IEEE Transactions on Control Systems Technology*, **2015**, 23, 290-296 | 4.8 | 43 |
| 117 | Linear Quadratic Feasible Predictive Control. *Automatica*, **1998**, 34, 1583-1592 | 5.7 | 43 |
| 116 | Robust Tubes in Nonlinear Model Predictive Control. *IEEE Transactions on Automatic Control*, **2011**, 56, 1942-1947 | 5.9 | 42 |
| 115 | Recent developments in stochastic MPC and sustainable development. *Annual Reviews in Control*, **2004**, 28, 23-35 | 10.3 | 39 |
| 114 | Distributed Stochastic MPC of Linear Systems With Additive Uncertainty and Coupled Probabilistic Constraints. *IEEE Transactions on Automatic Control*, **2017**, 62, 3474-3481 | 5.9 | 34 |
| 113 | Extended invariance and its use in model predictive control. *Automatica*, **2005**, 41, 2163-2169 | 5.7 | 34 |
| 112 | Cooperative distributed stochastic MPC for systems with state estimation and coupled probabilistic constraints. *Automatica*, **2015**, 61, 89-96 | 5.7 | 33 |
| 111 | Efficient MPC optimization using Pontryagin's minimum principle. *International Journal of Robust and Nonlinear Control*, **2008**, 18, 831-844 | 3.6 | 31 |
| 110 | MPC as a tool for sustainable development integrated policy assessment. *IEEE Transactions on Automatic Control*, **2006**, 51, 145-149 | 5.9 | 26 |
| 109 | . *IEEE Transactions on Automatic Control*, **2003**, 48, 1443-1447 | 5.9 | 26 |
| 108 | Energy Management in Plug-In Hybrid Electric Vehicles: Convex Optimization Algorithms for Model Predictive Control. *IEEE Transactions on Control Systems Technology*, **2020**, 28, 2191-2203 | 4.8 | 24 |
| 107 | On efficient computation of low-complexity controlled invariant sets for uncertain linear systems. *International Journal of Control*, **2010**, 83, 1339-1346 | 1.5 | 23 |
| 106 | Efficient non-linear model based predictive control. *International Journal of Control*, **2001**, 74, 361-372 | 1.5 | 21 |
| 105 | Infinite horizon predictive control of constrained continuous-time linear systems. *Automatica*, **2000**, 36, 943-955 | 5.7 | 20 |

| 104 | Computationally efficient algorithms for constraint handling with guaranteed stability and near optimality. *International Journal of Control*, **2001**, 74, 1678-1689 | 1.5 | 20 |
| 103 | Efficient active set optimization in triple mode MPC. *IEEE Transactions on Automatic Control*, **2001**, 46, 1307-1312 | 5.9 | 19 |
| 102 | Successive Linearization NMPC for a Class of Stochastic Nonlinear Systems. *Lecture Notes in Control and Information Sciences*, **2009**, 249-262 | 0.5 | 19 |
| 101 | Equi-normalization and exact scaling dynamics in homothetic tube model predictive control. *Systems and Control Letters*, **2013**, 62, 209-217 | 2.4 | 18 |
| 100 | Constrained predictive control and its application to a coupled-tanks apparatus. *International Journal of Control*, **2001**, 74, 552-564 | 1.5 | 17 |
| 99 | Consensus in opinion dynamics as a repeated game. *Automatica*, **2018**, 90, 204-211 | 5.7 | 16 |
| 98 | Adaptive Model Predictive Control with Robust Constraint Satisfaction. *IFAC-PapersOnLine*, **2017**, 50, 3313-3318 | 0.7 | 16 |
| 97 | Robust MPC strategy with optimized polytopic dynamics for linear systems with additive and multiplicative uncertainty. *Systems and Control Letters*, **2015**, 81, 34-41 | 2.4 | 16 |
| 96 | Fully parameterized tube model predictive control. *International Journal of Robust and Nonlinear Control*, **2012**, 22, 1330-1361 | 3.6 | 16 |
| 95 | MPC for Stochastic Systems **2007**, 255-268 | | 16 |
| 94 | Nonlinear constrained predictive control applied to a coupled-tanks apparatus. *IET Control Theory and Applications*, **2001**, 148, 17-24 | | 15 |
| 93 | LTV models in MPC for sustainable development. *International Journal of Control*, **2006**, 79, 63-73 | 1.5 | 14 |
| 92 | The design of dynamics in the prediction structure of robust MPC. *International Journal of Control*, **2013**, 86, 2096-2103 | 1.5 | 12 |
| 91 | Explicit use of probabilistic distributions in linear predictive control **2010**, | | 12 |
| 90 | Enlargement of polytopic terminal region in NMPC by interpolation and partial invariance. *Automatica*, **2004**, 40, 311-317 | 5.7 | 12 |
| 89 | Modelling and optimisation for sustainable development policy assessment. *European Journal of Operational Research*, **2005**, 164, 475-490 | 5.6 | 12 |
| 88 | Efficient Constrained Model Predictive Control with Asymptotic Optimality. *SIAM Journal on Control and Optimization*, **2002**, 41, 60-82 | 1.9 | 12 |
| 87 | Robust Adaptive Tube Model Predictive Control **2019**, | | 12 |

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| 86 | Fast Dual-Loop Nonlinear Receding Horizon Control for Energy Management in Hybrid Electric Vehicles. *IEEE Transactions on Control Systems Technology*, **2019**, 27, 1060-1070 | 4.8 | 12 |
| 85 | Fast Optimal Energy Management With Engine On/Off Decisions for Plug-in Hybrid Electric Vehicles **2019**, 3, 1074-1079 | | 11 |
| 84 | COSMO: A conic operator splitting method for large convex problems **2019**, | | 11 |
| 83 | Distributed stochastic MPC for systems with parameter uncertainty and disturbances. *International Journal of Robust and Nonlinear Control*, **2018**, 28, 2424-2441 | 3.6 | 11 |
| 82 | Efficient prediction strategies for disturbance compensation in stochastic MPC. *International Journal of Systems Science*, **2013**, 44, 1344-1353 | 2.3 | 11 |
| 81 | Fast suboptimal predictive control with guaranteed stability. *Systems and Control Letters*, **1998**, 35, 19-29 | 2.4 | 11 |
| 80 | An interpolation strategy for discrete-time bilinear MPC problems. *IEEE Transactions on Automatic Control*, **2002**, 47, 775-778 | 5.9 | 11 |
| 79 | Recent developments in generalized predictive control for continuous-time systems. *International Journal of Control*, **1999**, 72, 164-173 | 1.5 | 11 |
| 78 | Stochastic tube MPC for LPV systems with probabilistic set inclusion conditions **2014**, | | 10 |
| 77 | Fully Parameterized Tube MPC. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 197-202 | | 10 |
| 76 | Linear stochastic MPC under finitely supported multiplicative uncertainty **2012**, | | 10 |
| 75 | Stochastic Model Predictive Control with Discounted Probabilistic Constraints **2018**, | | 10 |
| 74 | Robust MPC for linear systems with bounded multiplicative uncertainty **2012**, | | 9 |
| 73 | Dynamic non-minimum phase compensation for SISO nonlinear, affine in the input systems. *Automatica*, **2006**, 42, 1969-1975 | 5.7 | 9 |
| 72 | Constrained MPC using feedback linearization on SISO bilinear systems with unstable inverse dynamics. *International Journal of Control*, **2005**, 78, 638-646 | 1.5 | 9 |
| 71 | Optimal Power Allocation in Battery/Supercapacitor Electric Vehicles Using Convex Optimization. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 12751-12762 | 6.8 | 9 |
| 70 | Regions of attraction and recursive feasibility in robust MPC **2013**, | | 8 |
| 69 | Nonlinear predictive control of hot strip rolling mill. *International Journal of Robust and Nonlinear Control*, **2003**, 13, 365-380 | 3.6 | 8 |

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| 68 | Constrained NMPC via state-space partitioning for input affine non-linear systems. *International Journal of Control*, **2003**, 76, 1516-1526 | 1.5 | 8 |
| 67 | Optimal energy management for hybrid electric aircraft. *IFAC-PapersOnLine*, **2020**, 53, 6043-6049 | 0.7 | 8 |
| 66 | Striped Parameterized Tube Model Predictive Control. *Automatica*, **2016**, 67, 303-309 | 5.7 | 8 |
| 65 | An active set solver for input-constrained robust receding horizon control. *Automatica*, **2014**, 50, 155-161 | 5.7 | 7 |
| 64 | Stochastic MPC for Systems with both Multiplicative and Additive Disturbances. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 2291-2296 | | 7 |
| 63 | Robust positively invariant sets for state dependent and scaled disturbances **2015**, | | 7 |
| 62 | Improvements in the efficiency of linear MPC. *Automatica*, **2010**, 46, 226-229 | 5.7 | 7 |
| 61 | A line search improvement of efficient MPC. *Automatica*, **2010**, 46, 1920-1924 | 5.7 | 7 |
| 60 | Nonlinear MPC for supervisory control of hybrid electric vehicles **2016**, | | 7 |
| 59 | Stochastic MPC for Additive and Multiplicative Uncertainty Using Sample Approximations. *IEEE Transactions on Automatic Control*, **2019**, 64, 3883-3888 | 5.9 | 7 |
| 58 | An ADMM Algorithm for MPC-based Energy Management in Hybrid Electric Vehicles with Nonlinear Losses **2018**, | | 7 |
| 57 | Recursively feasible Robust MPC for linear systems with additive and multiplicative uncertainty using optimized polytopic dynamics **2013**, | | 6 |
| 56 | An algorithm for reducing complexity in parametric predictive control. *International Journal of Control*, **2005**, 78, 1511-1520 | 1.5 | 6 |
| 55 | Invariant sets for feedback linearisation based nonlinear predictive control. *IET Control Theory and Applications*, **2005**, 152, 259-265 | | 6 |
| 54 | On the Computation of $lambda$- Contractive Sets for Linear Constrained Systems. *IEEE Transactions on Automatic Control*, **2017**, 62, 1498-1504 | 5.9 | 5 |
| 53 | Striped Parameterized Tube Model Predictive Control. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 11998-12003 | | 5 |
| 52 | How scaling of the disturbance set affects robust positively invariant sets for linear systems. *International Journal of Robust and Nonlinear Control*, **2017**, 27, 3236-3258 | 3.6 | 5 |
| 51 | A missing link between nonlinear MPC schemes with guaranteed stability **2015**, | | 5 |

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| 50 | **2010**, | | 5 |
| 49 | Robust and stochastic linear MPC for systems subject to multiplicative uncertainty. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 335-341 | | 5 |
| 48 | Input–Output feedback linearization for nonminimum phase nonlinear systems through periodic use of synthetic outputs. *Systems and Control Letters*, **2008**, 57, 626-630 | 2.4 | 5 |
| 47 | Offline tube design for efficient implementation of parameterized tube model predictive control **2012**, | | 4 |
| 46 | Periodic use of time-varying state feedbacks for the receding horizon control of bilinear systems. *International Journal of Control, Automation and Systems*, **2009**, 7, 151-155 | 2.9 | 4 |
| 45 | A Youla parameter approach to robust constrained linear model predictive control **2009**, | | 4 |
| 44 | Extension of efficient predictive control to the nonlinear case. *International Journal of Robust and Nonlinear Control*, **2005**, 15, 219-231 | 3.6 | 4 |
| 43 | A clique graph based merging strategy for decomposable SDPs. *IFAC-PapersOnLine*, **2020**, 53, 7355-7361 | 0.7 | 4 |
| 42 | Robust adaptive model predictive control: Performance and parameter estimation. *International Journal of Robust and Nonlinear Control*, **2020**, | 3.6 | 4 |
| 41 | COSMO: A Conic Operator Splitting Method for Convex Conic Problems. *Journal of Optimization Theory and Applications*, **2021**, 190, 779-810 | 1.6 | 4 |
| 40 | Robust consensus in social networks and coalitional games. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 1537-1542 | | 3 |
| 39 | An active set solver for input-constrained robust receding horizon control **2011**, | | 3 |
| 38 | Relaxation of output zeroing for bilinear non-minimum phase systems. *International Journal of Control*, **2008**, 81, 1139-1146 | 1.5 | 3 |
| 37 | Mean-variance receding horizon control for discrete time linear stochastic systems. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2008**, 41, 15321-15326 | | 3 |
| 36 | MPC on state space models with stochastic input map **2006**, | | 3 |
| 35 | Asymmetric constraints with polytopic sets in MPC with application to coupled tanks system. *International Journal of Robust and Nonlinear Control*, **2004**, 14, 341-353 | 3.6 | 3 |
| 34 | Stability, Feasibility, Optimality and the Degrees of Freedom in Constrained Predictive Control **2000**, 99-113 | | 3 |
| 33 | Active set solver for min-max robust control with state and input constraints. *International Journal of Robust and Nonlinear Control*, **2016**, 26, 3209-3231 | 3.6 | 3 |

| 32 | Some observations on the activity of terminal constraints in linear MPC **2016**, | | 3 |
|---|---|---|---|
| 31 | Convergence of Stochastic Nonlinear Systems and Implications for Stochastic Model-Predictive Control. *IEEE Transactions on Automatic Control*, **2021**, 66, 2832-2839 | 5.9 | 3 |
| 30 | Fast Self-Triggered MPC for Constrained Linear Systems With Additive Disturbances. *IEEE Transactions on Automatic Control*, **2021**, 66, 3624-3637 | 5.9 | 3 |
| 29 | ADMM for MPC with state and input constraints, and input nonlinearity **2018**, | | 2 |
| 28 | Time-average constraints in stochastic Model Predictive Control **2017**, | | 2 |
| 27 | Application of Optimal Control Algorithm to Inertia Friction Welding Process. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 891-898 | 4.8 | 2 |
| 26 | An active set solver for min-max robust control **2013**, | | 2 |
| 25 | Efficient robust output feedback MPC. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 7957-7962 | | 2 |
| 24 | Efficient MPC Optimization using Pontryagin's Minimum Principle **2006**, | | 2 |
| 23 | Stochastic MPC with Dynamic Feedback Gain Selection and Discounted Probabilistic Constraints. *IEEE Transactions on Automatic Control*, **2021**, 1-1 | 5.9 | 2 |
| 22 | Scenario Model Predictive Control for Data-Based Energy Management in Plug-In Hybrid Electric Vehicles. *IEEE Transactions on Control Systems Technology*, **2022**, 1-12 | 4.8 | 2 |
| 21 | Introduction to Stochastic MPC **2016**, 243-269 | | 1 |
| 20 | Maximising the guaranteed feasible set for stochastic MPC with chance constraints. *IFAC-PapersOnLine*, **2017**, 50, 8220-8225 | 0.7 | 1 |
| 19 | On prediction strategies in stochastic MPC **2011**, | | 1 |
| 18 | A line search improvement of efficient MPC **2010**, | | 1 |
| 17 | Robust tubes in nonlinear model predictive control. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 208-213 | | 1 |
| 16 | MPC Stability Constraints and Their Implementations. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2000**, 33, 205-212 | | 1 |
| 15 | Output feedback stochastic MPC with packet losses. *IFAC-PapersOnLine*, **2020**, 53, 7105-7110 | 0.7 | 1 |

# List of Publications

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|---|---|---|---|
| 14 | Admissible sets for chance-constrained difference inclusions **2016**, | | 1 |
| 13 | Parametric robust positively invariant sets for linear systems with scaled disturbances **2016**, | | 1 |
| 12 | Robust MPC for Multiplicative and Mixed Uncertainty **2016**, 175-240 | | 0 |
| 11 | Closed-Loop Optimization Strategies for Additive Uncertainty **2016**, 121-174 | | 0 |
| 10 | Closed-Loop Stabilizing MPC for Discrete-Time Bilinear Systems. *European Journal of Control*, **2002**, 8, 304-314 | 2.5 | 0 |
| 9 | Invariant cover: Existence, cardinality bounds, and computation. *Automatica*, **2021**, 129, 109588 | 5.7 | 0 |
| 8 | Stochastic output feedback MPC with intermittent observations. *Automatica*, **2022**, 141, 110282 | 5.7 | 0 |
| 7 | Open-Loop Optimization Strategies for Additive Uncertainty **2016**, 67-119 | | |
| 6 | Feasibility, Stability, Convergence and Markov Chains **2016**, 271-301 | | |
| 5 | MPC with No Model Uncertainty **2016**, 13-64 | | |
| 4 | Robust receding horizon control for linear systems with state and input dependent disturbances. *IFAC-PapersOnLine*, **2015**, 48, 533-539 | 0.7 | |
| 3 | Probabilistic constrained MPC for systems with multiplicative and additive stochastic uncertainty. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2008**, 41, 15297-15302 | | |
| 2 | Constrained predictive control of linear distributed parameter systems. *International Journal of Control*, **2004**, 77, 941-948 | 1.5 | |
| 1 | Explicit Use of Probability Distributions in SMPC **2016**, 303-341 | | |