

# J Anthony Rossiter

## List of Publications by Year in descending order

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127  
papers

2,824  
citations

257450  
24  
h-index

189892  
50  
g-index

127  
all docs

127  
docs citations

127  
times ranked

1215  
citing authors

#	ARTICLE	IF	CITATIONS
1	Systems with persistent disturbances: predictive control with restricted constraints. <i>Automatica</i> , 2001, 37, 1019-1028.	5.0	528
2	Efficient robust predictive control. <i>IEEE Transactions on Automatic Control</i> , 2000, 45, 1545-1549.	5.7	386
3	A numerically robust state-space approach to stable-predictive control strategies. <i>Automatica</i> , 1998, 34, 65-73.	5.0	229
4	Who needs QP for linear MPC anyway?. <i>Automatica</i> , 2002, 38, 879-884.	5.0	96
5	Stable generalized predictive control with constraints and bounded disturbances. <i>Automatica</i> , 1997, 33, 551-568.	5.0	87
6	Looper and tension control in hot rolling mills: A survey. <i>Journal of Process Control</i> , 2007, 17, 509-521.	3.3	70
7	Programmable logic controller implementation of an auto-tuned predictive control based on minimal plant information. <i>ISA Transactions</i> , 2011, 50, 92-100.	5.7	61
8	Non-linear model based predictive control. <i>International Journal of Control</i> , 1999, 72, 919-928.	1.9	58
9	Interpolation based computationally efficient predictive control. <i>International Journal of Control</i> , 2004, 77, 290-301.	1.9	54
10	Modelling and implicit modelling for predictive control. <i>International Journal of Control</i> , 2001, 74, 1085-1095.	1.9	51
11	Efficient algorithms for trading off feasibility and performance in predictive control. <i>International Journal of Control</i> , 2010, 83, 789-797.	1.9	46
12	A survey of good practice in control education. <i>European Journal of Engineering Education</i> , 2018, 43, 801-823.	2.3	46
13	Efficient suboptimal parametric solutions to predictive control for PLC applications. <i>Control Engineering Practice</i> , 2011, 19, 732-743.	5.5	45
14	Infinite horizon stable predictive control. <i>IEEE Transactions on Automatic Control</i> , 1996, 41, 1522-1527.	5.7	43
15	Using interpolation to improve efficiency of multiparametric predictive control. <i>Automatica</i> , 2005, 41, 637-643.	5.0	37
16	Data-driven latent-variable model-based predictive control for continuous processes. <i>Journal of Process Control</i> , 2010, 20, 1207-1219.	3.3	37
17	The Effect of Coincidence Horizon on Predictive Functional Control. <i>Processes</i> , 2015, 3, 25-45.	2.8	35
18	Robust triple mode MPC. <i>International Journal of Control</i> , 2008, 81, 679-689.	1.9	34

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19	Interpolation methods in model predictive control: an overview. <i>International Journal of Control</i> , 2010, 83, 297-312.	1.9	29
20	Fundamental performance similarities between individual pitch control strategies for wind turbines. <i>International Journal of Control</i> , 2017, 90, 37-52.	1.9	28
21	Improving the feed-forward compensator in predictive control for setpoint tracking. <i>ISA Transactions</i> , 2014, 53, 755-766.	5.7	27
22	Pole-placement Predictive Functional Control for over-damped systems with real poles. <i>ISA Transactions</i> , 2016, 61, 229-239.	5.7	27
23	Computationally efficient algorithms for constraint handling with guaranteed stability and near optimality. <i>International Journal of Control</i> , 2001, 74, 1678-1689.	1.9	26
24	A survey of international views on a first course in systems and control for engineering undergraduates. <i>IFAC Journal of Systems and Control</i> , 2020, 13, 100092.	1.7	26
25	Conditions for which linear MPC converges to the correct target. <i>Journal of Process Control</i> , 2010, 20, 1243-1251.	3.3	25
26	State-space approach to interpolation in MPC. <i>International Journal of Robust and Nonlinear Control</i> , 2000, 10, 27-38.	3.7	24
27	Efficient active set optimization in triple mode MPC. <i>IEEE Transactions on Automatic Control</i> , 2001, 46, 1307-1312.	5.7	24
28	Alternative parameterisation within predictive control: a systematic selection. <i>International Journal of Control</i> , 2013, 86, 1397-1409.	1.9	24
29	Novel programmable logic controller implementation of a predictive controller based on Laguerre functions and multiparametric solutions. <i>IET Control Theory and Applications</i> , 2012, 6, 1003-1014.	2.1	23
30	Preview predictive control layer design based upon known wind turbine blade pitch controllers. <i>Wind Energy</i> , 2017, 20, 1207-1226.	4.2	23
31	Estimation and Control of Wind Turbine Tower Vibrations Based on Individual Blade-Pitch Strategies. <i>IEEE Transactions on Control Systems Technology</i> , 2019, 27, 1820-1828.	5.2	23
32	Feasibility and stability results for constrained stable generalized predictive control. <i>Automatica</i> , 1995, 31, 863-877.	5.0	22
33	Input shaping for PFC: how and why?. <i>Journal of Control and Decision</i> , 2016, 3, 105-118.	1.6	18
34	Towards an improved gain scheduling predictive control strategy for a solar thermal power plant. <i>IET Control Theory and Applications</i> , 2017, 11, 1938-1947.	2.1	18
35	Interpretations of and options in dual-rate predictive control. <i>Journal of Process Control</i> , 2005, 15, 135-148.	3.3	17
36	Development of Constrained Predictive Functional Control using Laguerre Function Based Prediction. <i>IFAC-PapersOnLine</i> , 2017, 50, 10705-10710.	0.9	17

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37	Pole-placement Predictive Functional Control for under-damped systems with real numbers algebra. ISA Transactions, 2017, 71, 403-414.	5.7	16
38	Cautious stable predictive control: A guaranteed stable predictive control algorithm with low input activity and good robustness. International Journal of Control, 1997, 67, 675-698.	1.9	15
39	Applying predictive control to a fossil-fired power station. Transactions of the Institute of Measurement and Control, 2002, 24, 177-194.	1.7	15
40	Using interactive tools to create an enthusiasm for control in aerospace and chemical engineers. IFAC-PapersOnLine, 2017, 50, 9120-9125.	0.9	15
41	Distributed model predictive based secondary control for economic production and frequency regulation of MG. IET Control Theory and Applications, 2019, 13, 2948-2958.	2.1	14
42	Using Laguerre functions to improve the tuning and performance of predictive functional control. International Journal of Control, 2021, 94, 202-214.	1.9	14
43	H <sub>2</sub> - and H <sub>∞</sub> -approximations for eigenvalues/vector functions of transfer matrices. International Journal of Control, 1990, 51, 1015-1049.	1.9	13
44	Improving the Tracking of Generalized Predictive Control Controllers. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 1996, 210, 169-182.	1.0	13
45	Alternative parameterisations for predictive control: How and why?. , 2011, , .		13
46	Which Technology Can Really Enhance Learning within Engineering?. International Journal of Electrical Engineering and Education, 2011, 48, 231-244.	0.8	13
47	Notes on Multi-Step Ahead Prediction Based on the Principle of Concatenation. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 1993, 207, 261-263.	1.0	11
48	An algorithm for reducing complexity in parametric predictive control. International Journal of Control, 2005, 78, 1511-1520.	1.9	11
49	A priori stability results for PFC. International Journal of Control, 2017, 90, 289-297.	1.9	11
50	Input Shaping Predictive Functional Control for Different Types of Challenging Dynamics Processes. Processes, 2018, 6, 118.	2.8	11
51	Predictive functional control for integrator systems. Journal of the Franklin Institute, 2020, 357, 4171-4186.	3.4	11
52	Distributed MPC for economic dispatch and intermittence control of renewable based autonomous microgrid. Electric Power Systems Research, 2021, 195, 107131.	3.6	11
53	Long horizon input parameterisations to enlarge the region of attraction of MPC. Optimal Control Applications and Methods, 2016, 37, 139-153.	2.1	10
54	Causal eigenvector function approximations and the problem of scaling: an algorithm. International Journal of Control, 1991, 53, 509-525.	1.9	9

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55	A survey of techniques and opportunities in power system automatic generation control. , 2014, , .		9
56	A survey of guaranteeing feasibility and stability in MPC during target changes. IFAC-PapersOnLine, 2015, 48, 813-818.	0.9	9
57	A Comparison of Tuning Methods for Predictive Functional Control. Processes, 2021, 9, 1140.	2.8	9
58	Alternative Method for Predictive Functional Control to Handle an Integrating Process. , 2018, , .		8
59	Role of input weighting and bounding in the characteristic GPC method. International Journal of Control, 1990, 51, 391-419.	1.9	7
60	A priori stability conditions for an arbitrary number of unstable poles. Automatica, 1996, 32, 1441-1446.	5.0	7
61	A Youla parameter approach to robust constrained linear model predictive control. , 2009, , .		7
62	Case studies in making assessment efficient while developing student professionalism and managing transition. European Journal of Engineering Education, 2013, 38, 582-594.	2.3	7
63	A survey of control strategies for spacecraft attitude and orientation. , 2016, , .		7
64	Distributed model predictive load frequency control of a deregulated power system. , 2016, , .		7
65	The Potential of Interpolation for Simplifying Predictive Control and Application to LPV Systems. Lecture Notes in Control and Information Sciences, 2007, , 63-76.	1.0	7
66	Branch-point placement. Linear Algebra and Its Applications, 1990, 140, 217-249.	0.9	6
67	Generalized Nyquist bands for structured and highly structured uncertainty. International Journal of Control, 1991, 53, 1295-1309.	1.9	6
68	Robust stable generalized predictive control. International Journal of Control, 1997, 67, 411-434.	1.9	6
69	Predictive Controllers with Guaranteed Stability and Mean-Level Controllers for Unstable Plant. European Journal of Control, 1997, 3, 292-303.	2.6	6
70	A move-blocking strategy to improve tracking in predictive control. , 2010, , .		6
71	Application of decaying boundary layer and switching function method thorough error feedback for sliding mode control on spacecraft's attitude. , 2017, , .		6
72	Systematic and effective embedding of feedforward of target information into MPC. International Journal of Control, 2020, 93, 98-112.	1.9	6

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73	Distributed MPC for Upstream Oil & Gas Fields - a practical view. IFAC-PapersOnLine, 2015, 48, 325-330.	0.9	5
74	Utilising Laguerre function in predictive functional control to ensure prediction consistency. , 2016, , .		5
75	State-space approach to stabilizing stochastic predictive control. International Journal of Control, 1996, 65, 619-637.	1.9	4
76	Robust constrained predictive controllers for hot rolling mills: Disturbance uncertainty case. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2008, 222, 137-152.	1.0	4
77	Triple mode MPC or laguerre MPC: A comparison. , 2011, , .		4
78	Encouraging student learning of control by embedding freedom into the curriculum: student perspectives and products. IFAC-PapersOnLine, 2017, 50, 12149-12154.	0.9	4
79	Predictive Functional Control for Unstable First-Order Dynamic Systems. Lecture Notes in Electrical Engineering, 2021, , 12-22.	0.4	4
80	Predictive Functional Control with Explicit Pre-conditioning for Oscillatory Dynamic Systems. , 2021, , .		4
81	A low-cost pole-placement MPC algorithm for controlling complex dynamic systems. Journal of Process Control, 2022, 111, 106-116.	3.3	4
82	Stable prediction for unstable independent models. IEEE Transactions on Automatic Control, 2003, 48, 2029-2035.	5.7	3
83	Robust MPC algorithms using alternative parameterisations. , 2012, , .		3
84	Making Learning Accessible and Encouraging Student Independence with Low Cost Developments. Engineering Education, 2013, 8, 15-29.	0.3	3
85	Using clickers in lectures to help identify and teach the control topics students find difficult. , 2014, , .		3
86	Enthusing students to engage and learn control with flexible multimedia assignments. IFAC-PapersOnLine, 2015, 48, 211-216.	0.9	3
87	Analysis and design of a tower motion estimator for wind turbines. , 2016, , .		3
88	Using an understanding of feedback processes to improve student learning. IFAC-PapersOnLine, 2016, 49, 57-62.	0.9	3
89	The feasibility of parametric approaches to predictive control when using far future feed forward information. , 2017, , .		3
90	A new paradigm for Predictive Functional Control to enable more consistent tuning. , 2019, , .		3

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91	Improving the use of feedforward in Predictive Functional Control to improve the impact of tuning. International Journal of Control, 2022, 95, 1206-1217.	1.9	3
92	Pre-stabilised Predictive Functional Control for Open-loop Unstable Dynamic Systems. IFAC-PapersOnLine, 2021, 54, 147-152.	0.9	3
93	Predictive functional control for challenging dynamic processes using a simple prestabilization strategy. Advanced Control for Applications, 2022, 4, .	1.7	3
94	Recent Developments in Tuning Methods for Predictive Functional Control. Processes, 2022, 10, 1398.	2.8	3
95	Bicausal representations and multivariable generalized predictive control. Automatica, 1991, 27, 819-828.	5.0	2
96	Predictive control design on an embedded robust output-feedback compensator for wind turbine blade-pitch preview control. , 2016, , .		2
97	Efficient robust feed forward model predictive control with tracking. , 2016, , .		2
98	The effect of model structure on the noise and disturbance sensitivity of Predictive Functional Control. , 2018, , .		2
99	Towards an Improved Hierarchical Control Strategy for a Solar Thermal Power Plant. , 2018, , .		2
100	Using Quizzes Instead of Paper Based Exams to Assess Control Topics. , 2018, , .		2
101	Evaluation of software tools for formative assessment of control topics. IFAC-PapersOnLine, 2019, 52, 292-297.	0.9	2
102	Model Predictive Control for Wave Energy Converters: A Moving Window Blocking Approach. IFAC-PapersOnLine, 2020, 53, 12815-12821.	0.9	2
103	Intuitive Programming with Remotely Instructed Robots inside Future Gloveboxes. , 2020, , .		2
104	Future Trends for a First Course in Control Engineering. Frontiers in Control Engineering, 0, 3, .	0.6	2
105	Eigenstructure approximations and their use for a commutative controller strategy: Application to a helicopter. Control Engineering Practice, 1993, 1, 357-363.	5.5	1
106	Stable GPC by dynamic programming. Systems and Control Letters, 1998, 33, 291-300.	2.3	1
107	Computing the Autopilot Control Algorithm Using Predictive Functional Control for Unstable Model. , 2009, , .		1
108	Sustaining trajectory flexibility for air traffic complexity alleviation. , 2012, , .		1

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109	A systematic selection of an alternative parameterisation for predictive control. , 2012, , .		1
110	Gas Phase Train in Upstream Oil & Gas Fields: PART-III Control System Design. IFAC-PapersOnLine, 2017, 50, 13735-13740.	0.9	1
111	A Formal Sensitivity Analysis for Laguerre Based Predictive Functional Control. , 2018, , .		1
112	Modular Model Predictive Control upon an Existing Controller. Processes, 2020, 8, 855.	2.8	1
113	IMPROVED CONSTRAINT HANDLING APPROACH FOR PREDICTIVE FUNCTIONAL CONTROL USING AN IMPLIED CLOSED-LOOP PREDICTION. IJUM Engineering Journal, 2021, 22, 323-338.	0.8	1
114	Efficiency-aware nonlinear model-predictive control with real-time iteration scheme for wave energy converters. International Journal of Control, 2023, 96, 1909-1921.	1.9	1
115	Predictive Functional Control for Difficult Second-Order Dynamics with a Simple Pre-compensation Strategy. , 2022, , .		1
116	A discrete characteristic locus design for a multichannel structural test system. Transactions of the Institute of Measurement and Control, 1994, 16, 258-267.	1.7	0
117	An efficient quadratic programming algorithm for predictive control. , 2001, , .		0
118	Industrial oil producing stations: Modeling and analysis using petri nets and intelligent schemes. , 2010, , .		0
119	New comparisons and overview of interpolation methods for the uncertain case. , 2010, , .		0
120	Gas phase train in upstream oil & gas fields: Part-II disturbances impact study. , 2016, , .		0
121	Using MATLAB GUIs to Improve Student Engagement and Understanding. , 2018, , .		0
122	On an IFAC Online Pilot Survey for a First Course on Control. , 2019, , .		0
123	Using interactive tools to facilitate student self-testing of dynamics and PI compensation. IFAC-PapersOnLine, 2020, 53, 17604-17609.	0.9	0
124	Resources to support a first course in feedback, dynamics and control. , 2021, , .		0
125	An efficient condensing algorithm for fast closed loop dual-mode nonlinear model predictive control. IET Control Theory and Applications, 2022, 16, 872-888.	2.1	0
126	Predictive Functional Control for Difficult Dynamic Processes with a Simplified Tuning Mechanism. , 2022, , .		0



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127	A novel approach to PFC for nonlinear systems. European Journal of Control, 2022, , 100668.	2.6	0