J Anthony Rossiter

List of Publications by Year
in descending order

127	2,824	257450 24	189892 50
papers	citations	h-index	g-index

127	127	127	1215
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	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
3	Predictive functional control for challenging dynamic processes using a simple prestabilization strategy. Advanced Control for Applications, 2022, 4, .	1.7	3
4	A low-cost pole-placement MPC algorithm for controlling complex dynamic systems. Journal of Process Control, 2022, 111, 106-116.	3.3	4
5	An efficient condensing algorithm for fast closed loop dualâ€mode nonlinear model predictive control. IET Control Theory and Applications, 2022, 16, 872-888.	2.1	0
6	Predictive Functional Control for Difficult Dynamic Processes with a Simplified Tuning Mechanism. , 2022, , .		0
7	Predictive Functional Control for Difficult Second-Order Dynamics with a Simple Pre-compensation Strategy. , 2022, , .		1
8	A novel approach to PFC for nonlinear systems. European Journal of Control, 2022, , 100668.	2.6	0
9	Recent Developments in Tuning Methods for Predictive Functional Control. Processes, 2022, 10, 1398.	2.8	3
10	Using Laguerre functions to improve the tuning and performance of predictive functional control. International Journal of Control, 2021, 94, 202-214.	1.9	14
11	IMPROVED CONSTRAINT HANDLING APPROACH FOR PREDICTIVE FUNCTIONAL CONTROL USING AN IMPLIED CLOSED-LOOP PREDICTION. IIUM Engineering Journal, 2021, 22, 323-338.	0.8	1
12	Pre-stabilised Predictive Functional Control for Open-loop Unstable Dynamic Systems. IFAC-PapersOnLine, 2021, 54, 147-152.	0.9	3
13	A Comparison of Tuning Methods for Predictive Functional Control. Processes, 2021, 9, 1140.	2.8	9
14	Distributed MPC for economic dispatch and intermittence control of renewable based autonomous microgrid. Electric Power Systems Research, 2021, 195, 107131.	3.6	11
15	Predictive Functional Control for Unstable First-Order Dynamic Systems. Lecture Notes in Electrical Engineering, 2021, , 12-22.	0.4	4
16	Predictive Functional Control with Explicit Pre-conditioning for Oscillatory Dynamic Systems. , 2021, , .		4
17	Resources to support a first course in feedback, dynamics and control. , 2021, , .		0
18	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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19	Modular Model Predictive Control upon an Existing Controller. Processes, 2020, 8, 855.	2.8	1
20	A survey of international views on a first course in systems and control for engineering undergraduates. IFAC Journal of Systems and Control, 2020, 13, 100092.	1.7	26
21	Predictive functional control for integrator systems. Journal of the Franklin Institute, 2020, 357, 4171-4186.	3.4	11
22	Model Predictive Control for Wave Energy Converters: A Moving Window Blocking Approach. IFAC-PapersOnLine, 2020, 53, 12815-12821.	0.9	2
23	Using interactive tools to facilitate student self-testing of dynamics and PI compensation. IFAC-PapersOnLine, 2020, 53, 17604-17609.	0.9	0
24	Intuitive Programming with Remotely Instructed Robots inside Future Gloveboxes. , 2020, , .		2
25	Estimation and Control of Wind Turbine Tower Vibrations Based on Individual Blade-Pitch Strategies. IEEE Transactions on Control Systems Technology, 2019, 27, 1820-1828.	5.2	23
26	Evaluation of software tools for formative assessment of control topics. IFAC-PapersOnLine, 2019, 52, 292-297.	0.9	2
27	On an IFAC Online Pilot Survey for a First Course on Control. , 2019, , .		0
28	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
29	A new paradigm for Predictive Functional Control to enable more consistent tuning. , 2019, , .		3
30	A survey of good practice in control education. European Journal of Engineering Education, 2018, 43, 801-823.	2.3	46
31	A Formal Sensitivity Analysis for Laguerre Based Predictive Functional Control. , 2018, , .		1
32	The effect of model structure on the noise and disturbance sensitivity of Predictive Functional Control. , 2018, , .		2
33	Towards an Improved Hierarchical Control Strategy for a Solar Thermal Power Plant. , 2018, , .		2
34	Using MATLAB GUIs to Improve Student Engagement and Understanding. , 2018, , .		0
35	Using Quizzes Instead of Paper Based Exams to Assess Control Topics. , 2018, , .		2
36	Alternative Method for Predictive Functional Control to Handle an Integrating Process. , 2018, , .		8

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37	Input Shaping Predictive Functional Control for Different Types of Challenging Dynamics Processes. Processes, 2018, 6, 118.	2.8	11
38	Fundamental performance similarities between individual pitch control strategies for wind turbines. International Journal of Control, 2017, 90, 37-52.	1.9	28
39	A priori stability results for PFC. International Journal of Control, 2017, 90, 289-297.	1.9	11
40	Preview predictive control layer design based upon known wind turbine bladeâ€pitch controllers. Wind Energy, 2017, 20, 1207-1226.	4.2	23
41	Pole-placement Predictive Functional Control for under-damped systems with real numbers algebra. ISA Transactions, 2017, 71, 403-414.	5.7	16
42	Gas Phase Train in Upstream Oil & Gas Fields: PART-III Control System Design. IFAC-PapersOnLine, 2017, 50, 13735-13740.	0.9	1
43	Towards an improved gain scheduling predictive control strategy for a solar thermal power plant. IET Control Theory and Applications, 2017, 11, 1938-1947.	2.1	18
44	The feasibility of parametric approaches to predictive control when using far future feed forward information. , 2017, , .		3
45	Using interactive tools to create an enthusiasm for control in aerospace and chemical engineers. IFAC-PapersOnLine, 2017, 50, 9120-9125.	0.9	15
46	Encouraging student learning of control by embedding freedom into the curriculum: student perspectives and products. IFAC-PapersOnLine, 2017, 50, 12149-12154.	0.9	4
47	Development of Constrained Predictive Functional Control using Laguerre Function Based Prediction. IFAC-PapersOnLine, 2017, 50, 10705-10710.	0.9	17
48	Application of decaying boundary layer and switching function method thorough error feedback for sliding mode control on spacecraft's attitude. , 2017, , .		6
49	Utilising Laguerre function in predictive functional control to ensure prediction consistency. , 2016, , .		5
50	Gas phase train in upstream oil & gas fields: Part-II disturbances impact study. , 2016, , .		0
51	Analysis and design of a tower motion estimator for wind turbines. , 2016, , .		3
52	A survey of control strategies for spacecraft attitude and orientation. , 2016, , .		7
53	Predictive control design on an embedded robust output-feedback compensator for wind turbine blade-pitch preview control. , 2016, , .		2
54	Using an understanding of feedback processes to improve student learning. IFAC-PapersOnLine, 2016, 49, 57-62.	0.9	3

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55	Efficient robust feed forward model predictive control with tracking. , 2016, , .		2
56	Distributed model predictive load frequency control of a deregulated power system. , 2016, , .		7
57	Long horizon input parameterisations to enlarge the region of attraction of MPC. Optimal Control Applications and Methods, 2016, 37, 139-153.	2.1	10
58	Pole-placement Predictive Functional Control for over-damped systems with real poles. ISA Transactions, 2016, 61, 229-239.	5.7	27
59	Input shaping for PFC: how and why?. Journal of Control and Decision, 2016, 3, 105-118.	1.6	18
60	The Effect of Coincidence Horizon on Predictive Functional Control. Processes, 2015, 3, 25-45.	2.8	35
61	A survey of guaranteeing feasibility and stability in MPC during target changes. IFAC-PapersOnLine, 2015, 48, 813-818.	0.9	9
62	Enthusing students to engage and learn control with flexible multimedia assignments. IFAC-PapersOnLine, 2015, 48, 211-216.	0.9	3
63	Distributed MPC for Upstream Oil & Gas Fields - a practical view. IFAC-PapersOnLine, 2015, 48, 325-330.	0.9	5
64	Improving the feed-forward compensator in predictive control for setpoint tracking. ISA Transactions, 2014, 53, 755-766.	5.7	27
65	Using clickers in lectures to help identify and teach the control topics students find difficult. , 2014, , .		3
66	A survey of techniques and opportunities in power system automatic generation control. , 2014, , .		9
67	Alternative parameterisation within predictive control: a systematic selection. International Journal of Control, 2013, 86, 1397-1409.	1.9	24
68	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
69	Making Learning Accessible and Encouraging Student Independence with Low Cost Developments. Engineering Education, 2013, 8, 15-29.	0.3	3
70	Sustaining trajectory flexibility for air traffic complexity alleviation. , 2012, , .		1
71	A systematic selection of an alternative parameterisation for predictive control. , 2012, , .		1
72	Robust MPC algorithms using alternative parameterisations. , 2012, , .		3

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73	Novel programmable logic controller implementation of a predictive controller based on Laguerre functions and multiparametric solutions. IET Control Theory and Applications, 2012, 6, 1003-1014.	2.1	23
74	Alternative parameterisations for predictive control: How and why?. , 2011, , .		13
75	Triple mode MPC or laguerre MPC: A comparison. , 2011, , .		4
76	Efficient suboptimal parametric solutions to predictive control for PLC applications. Control Engineering Practice, 2011, 19, 732-743.	5.5	45
77	Programmable logic controller implementation of an auto-tuned predictive control based on minimal plant information. ISA Transactions, 2011, 50, 92-100.	5.7	61
78	Which Technology Can Really Enhance Learning within Engineering?. International Journal of Electrical Engineering and Education, 2011, 48, 231-244.	0.8	13
79	Data-driven latent-variable model-based predictive control for continuous processes. Journal of Process Control, 2010, 20, 1207-1219.	3.3	37
80	Conditions for which linear MPC converges to the correct target. Journal of Process Control, 2010, 20, 1243-1251.	3.3	25
81	A move-blocking strategy to improve tracking in predictive control. , 2010, , .		6
82	Industrial oil producing stations: Modeling and analysis using petri nets and intelligent schemes. , 2010, , .		0
83	Interpolation methods in model predictive control: an overview. International Journal of Control, 2010, 83, 297-312.	1.9	29
84	Efficient algorithms for trading off feasibility and performance in predictive control. International Journal of Control, 2010, 83, 789-797.	1.9	46
85	New comparisons and overview of interpolation methods for the uncertain case. , 2010, , .		0
86	A Youla parameter approach to robust constrained linear model predictive control. , 2009, , .		7
87	Computing the Autopilot Control Algorithm Using Predictive Functional Control for Unstable Model. , 2009, , .		1
88	Robust triple mode MPC. International Journal of Control, 2008, 81, 679-689.	1.9	34
89	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
90	Looper and tension control in hot rolling mills: A survey. Journal of Process Control, 2007, 17, 509-521.	3.3	70

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91	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
92	Using interpolation to improve efficiency of multiparametric predictive control. Automatica, 2005, 41, 637-643.	5.0	37
93	Interpretations of and options in dual-rate predictive control. Journal of Process Control, 2005, 15, 135-148.	3.3	17
94	An algorithm for reducing complexity in parametric predictive control. International Journal of Control, 2005, 78, 1511-1520.	1.9	11
95	Interpolation based computationally efficient predictive control. International Journal of Control, 2004, 77, 290-301.	1.9	54
96	Stable prediction for unstable independent models. IEEE Transactions on Automatic Control, 2003, 48, 2029-2035.	5.7	3
97	Applying predictive control to a fossil-fired power station. Transactions of the Institute of Measurement and Control, 2002, 24, 177-194.	1.7	15
98	Who needs QP for linear MPC anyway?. Automatica, 2002, 38, 879-884.	5.0	96
99	Modelling and implicit modelling for predictive control. International Journal of Control, 2001, 74, 1085-1095.	1.9	51
100	Computationally efficient algorithms for constraint handling with guaranteed stability and near optimality. International Journal of Control, 2001, 74, 1678-1689.	1.9	26
101	Efficient active set optimization in triple mode MPC. IEEE Transactions on Automatic Control, 2001, 46, 1307-1312.	5.7	24
102	An efficient quadratic programming algorithm for predictive control. , 2001, , .		0
103	Systems with persistent disturbances: predictive control with restricted constraints. Automatica, 2001, 37, 1019-1028.	5.0	528
104	State-space approach to interpolation in MPC. International Journal of Robust and Nonlinear Control, 2000, 10, 27-38.	3.7	24
105	Efficient robust predictive control. IEEE Transactions on Automatic Control, 2000, 45, 1545-1549.	5.7	386
106	Non-linear model based predictive control. International Journal of Control, 1999, 72, 919-928.	1.9	58
107	A numerically robust state-space approach to stable-predictive control strategies. Automatica, 1998, 34, 65-73.	5.0	229
108	Stable GPC by dynamic programming. Systems and Control Letters, 1998, 33, 291-300.	2.3	1

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109	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
110	Robust stable generalized predictive control. International Journal of Control, 1997, 67, 411-434.	1.9	6
111	Predictive Controllers with Guaranteed Stability and Mean-Level Controllers for Unstable Plant. European Journal of Control, 1997, 3, 292-303.	2.6	6
112	Stable generalized predictive control with constraints and bounded disturbances. Automatica, 1997, 33, 551-568.	5.0	87
113	Infinite horizon stable predictive control. IEEE Transactions on Automatic Control, 1996, 41, 1522-1527.	5.7	43
114	State-space approach to stabilizing stochastic predictive control. International Journal of Control, 1996, 65, 619-637.	1.9	4
115	A priori stability conditions for an arbitrary number of unstable poles. Automatica, 1996, 32, 1441-1446.	5.0	7
116	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
117	Feasibility and stability results for constrained stable generalized predictive control. Automatica, 1995, 31, 863-877.	5.0	22
118	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
119	Eigenstructure approximations and their use for a commutative controller strategy: Application to a helicopter. Control Engineering Practice, 1993, 1, 357-363.	5.5	1
120	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
121	Causal eigenvector function approximations and the problem of scaling: an algorithm. International Journal of Control, 1991, 53, 509-525.	1.9	9
122	Bicausal representations and multivariable generalized predictive control. Automatica, 1991, 27, 819-828.	5.0	2
123	Generalized Nyquist bands for structured and highly structured uncertainty. International Journal of Control, 1991, 53, 1295-1309.	1.9	6
124	H2- and Hâˆž-approximations for eigenvalues/vector functions of transfer matrices. International Journal of Control, 1990, 51, 1015-1049.	1.9	13
125	Role of input weighting and bounding in the characteristic GPC method. International Journal of Control, 1990, 51, 391-419.	1.9	7
126	Branch-point placement. Linear Algebra and Its Applications, 1990, 140, 217-249.	0.9	6

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127	Future Trends for a First Course in Control Engineering. Frontiers in Control Engineering, 0, 3, .	0.6	2