

Ian Postlethwaite

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

117
papers

2,170
citations

23
h-index

41
g-index

128
ext. papers

2,596
ext. citations

3.4
avg, IF

4.96
L-index

#	Paper	IF	Citations
117	Discrete-time adaptive control of uncertain sampled-data systems with uncertain input delay: a reduction. <i>IET Control Theory and Applications</i> , 2020 , 14, 1681-1691	2.5	3
116	. <i>IEEE Access</i> , 2019 , 7, 4327-4337	3.5	5
115	Cooperative Multiple Pursuers against a Single Evader. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2017 , 86, 551-567	2.9	15
114	Cubature H ∞ Information filter and its extensions. <i>European Journal of Control</i> , 2016 , 29, 17-32	2.5	8
113	UAV Path Following in Windy Urban Environments. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2014 , 74, 1013-1028	2.9	36
112	A Cooperative Pursuit-Evasion Game for Non-holonomic Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 1977-1984		10
111	A cubature H ∞ filter and its square-root version. <i>International Journal of Control</i> , 2014 , 87, 764-776	1.5	16
110	A Probabilistically Robust Path Planning Algorithm for UAVs Using Rapidly-Exploring Random Trees. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2013 , 71, 231-253	2.9	83
109	Experimental Implementation of a Nonlinear Dynamic Inversion Controller with Antiwindup. <i>Journal of Guidance, Control, and Dynamics</i> , 2013 , 36, 1035-1046	2.1	10
108	Square Root Cubature Information Filter. <i>IEEE Sensors Journal</i> , 2013 , 13, 750-758	4	81
107	Multi-agent motion planning for nonlinear Gaussian systems. <i>International Journal of Control</i> , 2013 , 86, 2075-2089	1.5	1
106	Authors Reply to Comments on On the Existence of Stable, Causal Multipliers for Systems With Slope-Restricted Nonlinearities. <i>IEEE Transactions on Automatic Control</i> , 2012 , 57, 2428-2430	5.9	11
105	Pilot-Involved-Oscillation Suppression Using Low-Order Antiwindup: Flight-Test Evaluation. <i>Journal of Guidance, Control, and Dynamics</i> , 2012 , 35, 471-483	2.1	8
104	A Continuous Local Motion Planning Framework for Unmanned Vehicles in Complex Environments. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2012 , 66, 477-494	2.9	10
103	Subspace and Bootstrap-Based Techniques for Helicopter Model Identification. <i>Journal of the American Helicopter Society</i> , 2011 , 56, 12002-1200213	1.2	4
102	A robust anti-windup design procedure for SISO systems. <i>International Journal of Control</i> , 2011 , 84, 351-369		12
101	Survey and application of sensor fault detection and isolation schemes. <i>Control Engineering Practice</i> , 2011 , 19, 658-674	3.9	113

100	SFDA of consecutive sensor faults using neural networks demonstrated on a UAV. <i>International Journal of Control</i> , 2010 , 83, 2308-2327	1.5	3
99	L2 gain bounds for systems with slope-restricted nonlinearities 2010 ,		5
98	A comparative study of NN- and EKF-based SFDA schemes with application to a nonlinear UAV model. <i>International Journal of Control</i> , 2010 , 83, 1025-1043	1.5	11
97	Design and Implementation of a Digital Multimode H _∞ Controller for the Spey Turbofan Engine. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2010 , 132,	1.6	3
96	Continuous Local Motion Planning & Control for Micro- Air-Vehicles in Complex Environments 2010 ,		5
95	Enabling the Operation of Multiple Micro-Air-Vehicles in Increasingly Complex Obstacle-Rich Environments 2010 ,		5
94	Anti-windup synthesis for systems with rate-limits using Riccati equations. <i>International Journal of Control</i> , 2010 , 83, 233-245	1.5	23
93	Structural adaptation and robustness of Dictyostelium ligand-receptor kinetics for low and high ligand concentrations. <i>International Journal of Robust and Nonlinear Control</i> , 2010 , 20, 1047-1058	3.6	
92	An intelligent suboptimal path planning algorithm using Rapidly-exploring Random Trees 2009 ,		4
91	On the existence of stable, causal multipliers for systems with slope-restricted nonlinearities 2009 ,		1
90	A case study on spacecraft attitude control 2009 ,		5
89	Subsonic Tests of a Flush Air Data Sensing System Applied to a Fixed-Wing Micro Air Vehicle. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2009 , 54, 275-295	2.9	7
88	Coprime factor based anti-windup synthesis for parameter-dependent systems. <i>Systems and Control Letters</i> , 2009 , 58, 810-817	2.4	22
87	Improving sector-based results for systems with dead-zone nonlinearities and constrained control applications. <i>Automatica</i> , 2009 , 45, 155-160	5.7	1
86	On the Existence of Stable, Causal Multipliers for Systems With Slope-Restricted Nonlinearities. <i>IEEE Transactions on Automatic Control</i> , 2009 , 54, 2697-2702	5.9	43
85	An LPV Loop Shaping Controller Design for the NASA-HL-20 Re-Entry Vehicle 2009 ,		7
84	Nonlinear Worst-Case Analysis of an LPV Controller for Approach-Phase of a Re-Entry Vehicle 2009 ,		8
83	Piloted Assessment of a Fault Diagnosis Algorithm on the ATTAS Aircraft 2009 ,		7

82	Situation Aware Trajectory Tracking for Micro Air Vehicles in Obstacle Rich Environments 2009 ,		3
81	Multi-UAV path planning in obstacle rich environments using Rapidly-exploring Random Trees 2009		28
80	Computational modelling suggests dynamic interactions between Ca ²⁺ , IP ₃ and G protein-coupled modules are key to robust Dictyostelium aggregation. <i>Molecular BioSystems</i> , 2009 , 5, 612-28		7
79	Crosstalk between G-protein and Ca ²⁺ pathways switches intracellular cAMP levels. <i>Molecular BioSystems</i> , 2009 , 5, 43-51		8
78	Elucidating the mechanisms of cooperative calcium-calmodulin interactions: a structural systems biology approach. <i>BMC Systems Biology</i> , 2008 , 2, 48	3.5	36
77	Discrete Robust Anti-Windup to Improve a Novel Dual-Stage Large-Span Track-Seek/Following Method. <i>IEEE Transactions on Control Systems Technology</i> , 2008 , 16, 1342-1351	4.8	14
76	A feedforward control synthesis approach for LPV systems 2008 ,		6
75	Multiple calcium binding sites make calmodulin multifunctional. <i>Molecular BioSystems</i> , 2008 , 4, 66-73		13
74	Evaluation of Stochastic Effects on Biomolecular Networks Using the Generalized Nyquist Stability Criterion. <i>IEEE Transactions on Automatic Control</i> , 2008 , 53, 1937-1941	5.9	6
73	Linear time-varying models can reveal non-linear interactions of biomolecular regulatory networks using multiple time-series data. <i>Bioinformatics</i> , 2008 , 24, 1286-92	7.2	12
72	2008 ,		8
71	Neural network based sensor validation scheme demonstrated on an unmanned air vehicle (UAV) model 2008 ,		6
70	Estimation of the Uncertainty in a Helicopter Dynamic Model Identified by the Subspace-based Method Using Bootstrap Techniques. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008 , 41, 8852-8859		1
69	Nonlinear Dynamic Inversion Based Anti-windup - An Aerospace Application. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008 , 41, 14156-14161		2
68	Improving sector-based results for systems with deadzone nonlinearities. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008 , 41, 7729-7734		
67	Practical approaches to low-order anti-windup compensator design: a flight control comparison. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008 , 41, 14162-14167		5
66	A robust override scheme enforcing strict output constraints for a class of strictly proper systems. <i>Automatica</i> , 2008 , 44, 753-760	5.7	9
65	Real-time path planning with limited information for autonomous unmanned air vehicles. <i>Automatica</i> , 2008 , 44, 696-712	5.7	53

64	. <i>Automatica</i> , 2008 , 44, 2081-2089	5.7	31
63	Incorporating Robustness Requirements Into Antiwindup Design. <i>IEEE Transactions on Automatic Control</i> , 2007 , 52, 1842-1855	5.9	105
62	Robust control applications. <i>Annual Reviews in Control</i> , 2007 , 31, 27-39	10.3	16
61	Nonlinear robustness analysis of flight control laws for highly augmented aircraft. <i>Control Engineering Practice</i> , 2007 , 15, 655-662	3.9	23
60	Design of Static H8 Linear Parameter Varying Controllers for Unmanned Aircraft. <i>Journal of Guidance, Control, and Dynamics</i> , 2007 , 30, 1829-1835	2.1	12
59	Stochastic noise and synchronisation during dictyostelium aggregation make cAMP oscillations robust. <i>PLoS Computational Biology</i> , 2007 , 3, e218	5	29
58	Real-Time Optimal Mission Scheduling and Flight Path Selection. <i>IEEE Transactions on Automatic Control</i> , 2007 , 52, 1119-1123	5.9	52
57	Anti-windup compensation of rate saturation in an experimental aircraft. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	20
56	Parameter Estimation Techniques for Helicopter Dynamic Modelling. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	4
55	STABILITY CRITERIA FOR RATE LIMITED LUR'E SYSTEMS WITH CONNECTIONS TO MAGNITUDE LIMITS AND ANTI-WINDUP. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007 , 40, 681-686		1
54	Performance-oriented antiwindup for a class of linear control systems with augmented neural network controller. <i>IEEE Transactions on Neural Networks</i> , 2007 , 18, 449-65		16
53	An Architecture for Design and Analysis of High-Performance Robust Antiwindup Compensators. <i>IEEE Transactions on Automatic Control</i> , 2007 , 52, 1672-1679	5.9	16
52	Case Study on Anti-windup Compensation - Micro-actuator Control in a Hard-Disk Drive 2007 , 413-430		0
51	Anti-windup Compensation and the Control of Input-Constrained Systems 2007 , 143-173		6
50	Real-Time Optimal Time-Critical Target Assignment for UAVs 2007 , 265-280		3
49	A comparison of rate-limit compensation schemes for pilot-induced-oscillation avoidance. <i>Aerospace Science and Technology</i> , 2006 , 10, 37-47	4.9	18
48	Design of Flight Controllers based on Simplified LPV model of a UAV 2006 ,		6
47	General Anti-windup synthesis for input constrained nonlinear systems controlled using nonlinear dynamic inversion 2006 ,		8

46	Computation of Worst-Case Pilot Inputs for Nonlinear Flight Control System Analysis. <i>Journal of Guidance, Control, and Dynamics</i> , 2006 , 29, 195-199	2.1	9
45	Clearance of Nonlinear Flight Control Laws Using Hybrid Evolutionary Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , 2006 , 10, 689-699	15.6	50
44	Anti-windup synthesis for PIO avoidance in an experimental aircraft 2006 ,		9
43	Discrete-time and sampled-data anti-windup synthesis: stability and performance. <i>International Journal of Systems Science</i> , 2006 , 37, 91-113	2.3	46
42	ROBUSTIFICATION OF STATIC AND LOW ORDER ANTI-WINDUP DESIGNS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006 , 39, 375-380		3
41	ANTI-WINDUP SYNTHESIS FOR NONLINEAR DYNAMIC INVERSION CONTROLLERS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006 , 39, 471-476		6
40	ROBUST CONTROL APPLICATIONS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006 , 39, 713-725		
39	ROBUSTNESS ANALYSIS OF NONLINEAR FLIGHT CONTROL LAWS OVER CONTINUOUS REGIONS OF THE FLIGHT ENVELOPE. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006 , 39, 53-58		4
38	Nonlinear robust performance analysis using complex-step gradient approximation. <i>Automatica</i> , 2006 , 42, 177-182	5.7	18
37	EXACT NONLINEAR MODELLING USING SYMBOLIC LINEAR FRACTIONAL TRANSFORMATIONS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005 , 38, 190-195		3
36	ANTI-WINDUP SYNTHESIS USING RICCATI EQUATIONS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005 , 38, 171-176		2
35	IMPROVING LOCAL ANTI-WINDUP PERFORMANCE: PRELIMINARY RESULTS ON A TWO-STAGE APPROACH. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2005 , 38, 210-215		5
34	Design and flight testing of various controllers for the Bell 205 helicopter. <i>Control Engineering Practice</i> , 2005 , 13, 383-398	3.9	28
33	Stochastic noise and synchronisation during Dictyostelium aggregation make cAMP oscillations robust. <i>PLoS Computational Biology</i> , 2005 , preprint, e218	5	
32	Multivariable override control for systems with output and state constraints. <i>International Journal of Robust and Nonlinear Control</i> , 2004 , 14, 1105-1131	3.6	9
31	A new perspective on static and low order anti-windup synthesis. <i>International Journal of Control</i> , 2004 , 77, 27-44	1.5	128
30	A UAV Waypoint Generator 2004 ,		18
29	Further results on full-order anti-windup synthesis: exploiting the stability multiplier. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004 , 37, 1105-1110		3

28	Discrete-time anti-windup: Part 1 Stability and performance 2003 ,		8
27	Case Studies Using Linear Matrix Inequalities for Optimal Anti-Windup Synthesis*. <i>European Journal of Control</i> , 2003 , 9, 463-473	2.5	17
26	Scheduling schemes for an integrated flight and propulsion control system. <i>Control Engineering Practice</i> , 2002 , 10, 685-696	3.9	19
25	Modeling and Computing Worst-Case Uncertainty Combinations for Flight Control Systems Analysis. <i>Journal of Guidance, Control, and Dynamics</i> , 2002 , 25, 1029-1039	2.1	12
24	WORST-CASE UNCERTAIN PARAMETER COMBINATIONS FOR FLIGHT CONTROL SYSTEMS ANALYSIS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2002 , 35, 253-258		1
23	LOCAL ANTI-WINDUP COMPENSATION USING OUTPUT LIMITING. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2002 , 35, 97-102		3
22	VARIOUS H ∞ CONTROLLERS FOR THE BELL 205: DESIGN AND FLIGHT TEST. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2002 , 35, 217-222		2
21	Feedforward control: a full-information approach. <i>Automatica</i> , 2001 , 37, 17-28	5.7	34
20	Input/Output Conditioning of Robust Integrated Flight and Propulsion Controller. <i>Journal of Guidance, Control, and Dynamics</i> , 2001 , 24, 1089-1099	2.1	5
19	New Tools for Computing Tight Bounds on the Real Structured Singular Value. <i>Journal of Guidance, Control, and Dynamics</i> , 2001 , 24, 1204-1213	2.1	31
18	Partitioning and re-design of H-infinity loop shaping integrated flight and propulsion control systems 2001 ,		1
17	A partitioned integrated flight and propulsion control system with engine safety limiting. <i>Control Engineering Practice</i> , 2000 , 8, 845-859	3.9	6
16	Linear conditioning for systems containing saturating actuators. <i>Automatica</i> , 2000 , 36, 1347-1354	5.7	144
15	Design and Piloted Simulation of a Robust Integrated Flight and Propulsion Controller. <i>Journal of Guidance, Control, and Dynamics</i> , 2000 , 23, 269-277	2.1	18
14	Robust Integrated Flight and Propulsion Controller for the Harrier Aircraft. <i>Journal of Guidance, Control, and Dynamics</i> , 1999 , 22, 286-290	2.1	7
13	An anti-windup scheme with closed-loop stability considerations. <i>Automatica</i> , 1999 , 35, 761-765	5.7	51
12	Anti-windup and bumpless-transfer schemes. <i>Automatica</i> , 1998 , 34, 199-210	5.7	141
11	A Discrete Time H ∞ Observer-Based Controller & Its Application to a Glass Tube Production Process. <i>European Journal of Control</i> , 1996 , 2, 112-125	2.5	5

10	Model reduction with balanced realizations. <i>International Journal of Control</i> , 1995 , 62, 33-64	1.5	36
9	Adaptive Neural Network Controller Design for Flexible Joint Robots using Singular Perturbation Technique. <i>Transactions of the Institute of Measurement and Control</i> , 1995 , 17, 120-131	1.8	23
8	A Simple Robust Control Scheme for Robot Manipulators With Only Joint Position Measurements. <i>International Journal of Robotics Research</i> , 1993 , 12, 490-496	5.7	20
7	Nonlinear Adaptive Control of Robots Including Motor Dynamics 1993 ,		8
6	H_2 Super-Optimal Solutions. <i>Control and Dynamic Systems</i> , 1992 , 183-246		1
5	On J-Lossless coprime factorizations and H_2 control. <i>International Journal of Robust and Nonlinear Control</i> , 1991 , 1, 47-68	3.6	20
4	Inner functions and a pseudo-singular-value decomposition in super-optimal H_2 control. <i>International Journal of Control</i> , 1990 , 51, 1119-1131	1.5	7
3	An H_∞ minimax approach to the design of robust control systems, part II: All solutions, all-pass form solutions and the Best H_∞ solution. <i>Systems and Control Letters</i> , 1986 , 7, 261-268	2.4	13
2	A robustness test for distributed feedback systems \square <i>International Journal of Control</i> , 1985 , 41, 973-980	1.5	2
1	An H_∞ minimax approach to the design of robust control systems. <i>Systems and Control Letters</i> , 1984 , 5, 81-88	2.4	23