

Pedro Albertos

List of Publications by Year in descending order

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159
papers

2,443
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163
all docs

163
docs citations

163
times ranked

1563
citing authors

#	ARTICLE	IF	CITATIONS
1	Predictor-Based Control of a Class of Time-Delay Systems and Its Application to Quadrotors. IEEE Transactions on Industrial Electronics, 2017, 64, 459-469.	7.9	110
2	Block multirate input-output model for sampled-data control systems. IEEE Transactions on Automatic Control, 1990, 35, 1085-1088.	5.7	89
3	Robust control design for long time-delay systems. Journal of Process Control, 2009, 19, 1640-1648.	3.3	80
4	Virtual and remote control laboratory development. IEEE Control Systems, 2005, 25, 35-39.	0.8	71
5	Model-based multirate controllers design. IEEE Transactions on Control Systems Technology, 2005, 13, 988-997.	5.2	67
6	A generalized smith predictor for unstable time-delay SISO systems. ISA Transactions, 2018, 72, 197-204.	5.7	65
7	Control of unstable non-minimum-phase delayed systems. Journal of Process Control, 2006, 16, 1099-1111.	3.3	60
8	Enhanced disturbance rejection for a predictor-based control of LTI systems with input delay. Automatica, 2016, 72, 205-208.	5.0	60
9	Dual-rate adaptive control. Automatica, 1996, 32, 1027-1030.	5.0	59
10	Robust tuning of a generalized predictor-based controller for integrating and unstable systems with long time-delay. Journal of Process Control, 2013, 23, 1205-1216.	3.3	57
11	Enhanced extended state observer-based control for systems with mismatched uncertainties and disturbances. ISA Transactions, 2018, 73, 1-10.	5.7	54
12	Robust Control of Quadrotors Based on an Uncertainty and Disturbance Estimator. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	1.6	52
13	Output prediction under scarce data operation: control applications. Automatica, 1999, 35, 1671-1681.	5.0	51
14	A new dead-time compensator to control stable and integrating processes with long dead-time. Automatica, 2008, 44, 1062-1071.	5.0	51
15	Real-time control of non-uniformly sampled systems. Control Engineering Practice, 1999, 7, 445-458.	5.5	48
16	Virtual sensors for control applications. Annual Reviews in Control, 2002, 26, 101-112.	7.9	47
17	Recursive identification under scarce measurements $\hat{\epsilon}^p$ convergence analysis. Automatica, 2002, 38, 535-544.	5.0	43
18	New Predictor and 2DOF Control Scheme for Industrial Processes With Long Time Delay. IEEE Transactions on Industrial Electronics, 2018, 65, 4247-4256.	7.9	43

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19	On generalized predictive control: Two alternative formulations. <i>Automatica</i> , 1989, 25, 753-755.	5.0	42
20	Robustness of a discrete-time predictor-based controller for time-varying measurement delay. <i>Control Engineering Practice</i> , 2012, 20, 102-110.	5.5	40
21	Interactive tool for analysis of time-delay systems with dead-time compensators. <i>Control Engineering Practice</i> , 2008, 16, 824-835.	5.5	39
22	Predictor-based stabilization of discrete time-varying input-delay systems. <i>Automatica</i> , 2012, 48, 454-457.	5.0	38
23	Self-oscillating and chaotic behaviour of a PI-controlled CSTR with control valve saturation. <i>Journal of Process Control</i> , 2004, 14, 51-59.	3.3	37
24	Feedback and Control for Everyone. , 2010, , .		35
25	Multi Sensor Fusion Framework for Indoor-Outdoor Localization of Limited Resource Mobile Robots. <i>Sensors</i> , 2013, 13, 14133-14160.	3.8	35
26	RT control scheduling to reduce control performance degrading. , 0, , .		34
27	Simple Real-time Attitude Stabilization of a Quad-rotor Aircraft With Bounded Signals. , 2006, , .		34
28	Dead-time-compensator for unstable MIMO systems with multiple time delays. <i>Journal of Process Control</i> , 2010, 20, 877-884.	3.3	34
29	Event-Based Localization in Ackermann Steering Limited Resource Mobile Robots. <i>IEEE/ASME Transactions on Mechatronics</i> , 2014, 19, 1171-1182.	5.8	34
30	Linear control of the flywheel inverted pendulum. <i>ISA Transactions</i> , 2014, 53, 1396-1403.	5.7	32
31	Output regulation for networked switched systems with alternate event-triggered control under transmission delays and packet losses. <i>Automatica</i> , 2021, 131, 109716.	5.0	32
32	Smith Predictor-Based Control Schemes for Dead-Time Unstable Cascade Processes. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 11471-11481.	3.7	29
33	Predictor-based observer-based control of systems with multiple input/output delays. <i>Journal of Process Control</i> , 2012, 22, 1350-1357.	3.3	29
34	Neural networks in virtual reference tuning. <i>Engineering Applications of Artificial Intelligence</i> , 2011, 24, 983-995.	8.1	28
35	Rejection of mismatched disturbances for systems with input delay via a predictive extended state observer. <i>International Journal of Robust and Nonlinear Control</i> , 2018, 28, 2457-2467.	3.7	28
36	PD control of robot manipulators with joint flexibility, actuators dynamics and friction. <i>Automatica</i> , 1999, 35, 1697-1700.	5.0	26

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37	Linear interpolation based controller design for trajectory tracking under uncertainties: Application to mobile robots. <i>Control Engineering Practice</i> , 2015, 45, 123-132.	5.5	26
38	Robustness analysis of discrete predictor-based controllers for input-delay systems. <i>International Journal of Systems Science</i> , 2013, 44, 232-239.	5.5	23
39	Reducing Delays in RT Control: The Control Action Interval. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1999, 32, 8527-8532.	0.4	22
40	PID Control. <i>Control Engineering Practice</i> , 2001, 9, 1159-1161.	5.5	22
41	Sliding mode speed auto-regulation technique for robotic tracking. <i>Robotics and Autonomous Systems</i> , 2011, 59, 519-529.	5.1	22
42	Inference error minimisation: fuzzy modelling of ambiguous functions. <i>Fuzzy Sets and Systems</i> , 2001, 121, 95-111.	2.7	21
43	Non-uniform sampled-data control of MIMO systems. <i>Annual Reviews in Control</i> , 2011, 35, 65-76.	7.9	20
44	On the linear control of underactuated systems: The flywheel inverted pendulum. , 2013, , .		20
45	Control and society. , 2009, , .		19
46	Estimation in multisensor networked systems with scarce measurements and time varying delays. <i>Systems and Control Letters</i> , 2012, 61, 555-562.	2.3	18
47	Robust predictive extended state observer for a class of nonlinear systems with time-varying input delay. <i>International Journal of Control</i> , 2020, 93, 217-225.	1.9	18
48	Design of robust output predictors under scarce measurements with time-varying delays. <i>Automatica</i> , 2007, 43, 281-289.	5.0	17
49	Tuning of a PID controlled gyro by using the bifurcation theory. <i>Systems and Control Letters</i> , 2008, 57, 10-17.	2.3	17
50	Robustness with respect to delay uncertainties of a predictor-observer based discrete-time controller. , 2006, , .		16
51	A Non-Uniform Predictor-Observer for a Networked Control System. <i>International Journal of Control, Automation and Systems</i> , 2011, 9, 1194-1202.	2.7	16
52	Robust controller design for inputâ€delayed systems using predictive feedback and an uncertainty estimator. <i>International Journal of Robust and Nonlinear Control</i> , 2017, 27, 1826-1840.	3.7	16
53	Robustness of a discrete-time predictor-based controller for time-varying measurement delay. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010, 43, 367-372.	0.4	14
54	A Transfer-Function Approach to Dual-Rate Controller Design for Unstable and Non-Minimum-Phase Plants. <i>IEEE Transactions on Control Systems Technology</i> , 2011, 19, 1186-1194.	5.2	13

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55	Analytical design of a generalised predictor-based control scheme for low-order integrating and unstable systems with long time delay. IET Control Theory and Applications, 2016, 10, 884-893.	2.1	13
56	Phase-conditionally stable systems. Systems and Control Letters, 2006, 55, 803-808.	2.3	12
57	Implementation of algebraic controllers for non-conventional sampled-data systems. Real-Time Systems, 2006, 35, 59-89.	1.3	12
58	H ∞ Observer Design for a Class of Nonlinear Discrete Systems. European Journal of Control, 2009, 15, 157-165.	2.6	12
59	Fuzzy systems evaluation: The inference error approach. IEEE Transactions on Systems, Man, and Cybernetics, 1998, 28, 268-275.	5.0	11
60	Extended state observer-based control for systems with locally Lipschitz uncertainties: LMI-based stability conditions. Systems and Control Letters, 2019, 134, 104526.	2.3	11
61	Event based distributed kalman filter for limited resource multirobot cooperative localization. Asian Journal of Control, 2019, 21, 1531-1546.	3.0	10
62	Scarce Data Operating Conditions: Process Model Identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 453-458.	0.4	9
63	Time delay limitations in control implementation. , 1999, , .		9
64	Tracking Control Design in Nonlinear Multivariable Systems: Robotic Applications. Mathematical Problems in Engineering, 2019, 2019, 1-15.	1.1	9
65	Linear Algebra Based Controllers. , 2020, , .		9
66	Fuzzy controllers design: a methodology. , 0, , .		8
67	FUZZY LOGIC MODELING OF SOCIAL BEHAVIOR. Cybernetics and Systems, 1994, 25, 343-358.	2.5	8
68	EMBEDDED CONTROL SYSTEMS: SOME ISSUES AND SOLUTIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 203-208.	0.4	8
69	On Hybrid Control of Nonlinear Systems Under Slow Sampling: Application to Induction Machines. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 303-308.	0.4	7
70	Multirate controllers design by rate decomposition. , 0, , .		7
71	Nonisothermal Stirred-Tank Reactor with Irreversible Exothermic Reaction A \rightarrow B: 2. Nonlinear Phenomena. , 2007, , 243-279.		7
72	Compensator design based on inverted decoupling for non-square processes. IET Control Theory and Applications, 2017, 11, 996-1005.	2.1	7

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73	Robust Design of the Uncertainty and Disturbance Estimator. IFAC-PapersOnLine, 2017, 50, 8262-8267.	0.9	7
74	Integrated Design and Implementation of Digital Controllers. Lecture Notes in Computer Science, 2001, , 385-392.	1.3	7
75	LQ optimal control for multirate sampled data systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 2876-2881.	0.4	6
76	CONTROL KERNEL: A KEY CONCEPT IN EMBEDDED CONTROL SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 330-335.	0.4	6
77	A quaternion-based and active disturbance rejection attitude control for quadrotor. , 2016, , .		6
78	Conversion of SISO processes with multiple time-delays to single time-delay processes. Journal of Process Control, 2018, 65, 84-90.	3.3	6
79	Robust nonlinear adaptive mould level control for steel continuous casting. IFAC-PapersOnLine, 2018, 51, 164-170.	0.9	6
80	Neuro-Fuzzy System for Compensating Slow Disturbances in Adaptive Mold Level Control. Metals, 2021, 11, 56.	2.3	6
81	Control de trayectorias basado en Álgebra lineal. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2020, 17, 344.	1.0	6
82	Design and Implementation of Kalman Filters applied to Lego NXT based Robots. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9830-9835.	0.4	5
83	Disturbance rejection in process control. , 2014, , .		5
84	A predictive extended state observer for a class of nonlinear systems with input delay subject to external disturbances. , 2017, , .		5
85	Robust stabilization of time-varying delay systems with predictor-observer based controller. IFAC-PapersOnLine, 2019, 52, 213-218.	0.9	5
86	Nonisothermal Stirred-Tank Reactor with Irreversible Exothermic Reaction $A \rightarrow B$: 1. Modeling and Local Control. , 2007, , 3-32.		5
87	Schedulability Issues in Complex Embedded Control Systems. , 2006, , .		5
88	Input-Output model for unconventional sampled-data control systems. , 1991, , 614-625.		4
89	Receding horizon control of non-uniformly sampled data systems. , 1999, , .		4
90	Fuzzy logic based look-up table controller with generalization. , 2000, , .		4

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91	ESSENTIAL CONTROL IN EMBEDDED CONTROL SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 186-191.	0.4	4
92	Dual-Rate Control Ripple Detection by an Approximate Frequency Response Methodology. , 2007, , .		4
93	Disturbance rejection: A central issue in process control. , 2015, , .		4
94	Fault-Detection via Parameter Estimation in Continuous-Time Systems with Random Sampling (Scarce) Tj ETQq0 0 0 rgBT /Overlock 10 T 335-340.	0.4	3
95	Some issues on AI techniques in RT process control. Annual Reviews in Control, 1999, 23, 125-137.	7.9	3
96	Periodic Optimal Control of Multirate Sampled Data Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 195-200.	0.4	3
97	Closed loop analysis of control systems under scarce measurements. , 0, , .		3
98	Platform for the development of mechatronic practical works based on LEGO Mindstorms NXT robots. , 2009, , .		3
99	A proposal for dual-rate controller design for unstable plants. , 2010, , .		3
100	Implementation of a bug algorithm in the e-puck from a hybrid control viewpoint. , 2010, , .		3
101	Control of Multi Delayed Plants: Recycling CSTR. , 2012, , .		3
102	Stabilizing Parametric Region of Multiloop PID Controllers for Multivariable Systems Based on Equivalent Transfer Function. Mathematical Problems in Engineering, 2016, 2016, 1-7.	1.1	3
103	Two-Degree-of-Freedom PID Tuning Based on an Uncertainty and Disturbance Estimator *. , 2018, , .		3
104	The inference error minimisation approach to fuzzy inference and knowledge analysis. , 0, , .		2
105	Real-Time Control of Unconventionally Sampled Data Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 1-13.	0.4	2
106	Disturbance rejection. , 1997, , 129-146.		2
107	Recursive Identification under Scarce Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 745-750.	0.4	2
108	ALGEBRAIC DESIGN OF MULTIRATE CONTROLLERS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 85-90.	0.4	2

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109	Virtual Sensors Under Delayed Scarce Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 85-90.	0.4	2
110	Algebraic Design of Multi-rate Control Systems for Environments with Limited Random Delays. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	2
111	Development of a test-bed to implement and validate real-time control strategies for aerial vehicles*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 7660-7665.	0.4	2
112	Optimal control of unstable input/output timeâ€delayed systems. Optimal Control Applications and Methods, 2012, 33, 445-460.	2.1	2
113	Control of input/output delayed and disturbed unstable plants. , 2015, , .		2
114	Some contributions to the design of dead-time compensators. , 2016, , .		2
115	Feed Furnace Temperature Control Based on the Distributed Deviations. Industrial & Engineering Chemistry Research, 2017, 56, 6035-6042.	3.7	2
116	Dead-time compensator for multi time-delay systems: The scalar case. , 2017, , .		2
117	Dead-Time Compensator for State-delay Stable Systems. IFAC-PapersOnLine, 2018, 51, 672-677.	0.9	2
118	A predictor-observer for a Networked Control System with time-varying delays and non-uniform sampling. , 2009, , .		2
119	Mixed Event-Triggered Output Regulation for Networked Switched Systems With Unstable Switching Dynamics Under Long-Duration DoS Attacks. IEEE Transactions on Cybernetics, 2023, 53, 7150-7161.	9.5	2
120	Perspectives of fuzzy control: lights and shadows. , 0, , .		1
121	Scarce Data Operating Conditions: Output Predictors. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 459-464.	0.4	1
122	Trends in Low Cost Automation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 1-8.	0.4	1
123	Trade-off Between Time Delays and Control Effort. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 287-291.	0.4	1
124	Online learning control of a gantry crane. , 0, , .		1
125	Initializing Parameter Estimation Algorithms Under Scarce Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 1897-1902.	0.4	1
126	State Feedback Control with Integrity. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 211-216.	0.4	1

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127	OUTPUT PREDICTION UNDER RANDOM MEASUREMENTS. AN LMI APPROACH. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 303-308.	0.4	1
128	Relevance of actions and measurements in control performances. Australian Journal of Electrical and Electronics Engineering, 2005, 2, 159-166.	1.2	1
129	Design of Low Cost Virtual Sensors. , 2006, , .		1
130	Middleware for Control Kernel Implementation in Embedded Control Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8475-8480.	0.4	1
131	Decoupling MIMO systems with multiple input/output time delays. , 2010, , .		1
132	Switching algorithm for fast robotic tracking under joint speed constraints. , 2010, , .		1
133	Control kernel based adaptive control implementation. ACM SIGBED Review, 2013, 10, 24-28.	1.8	1
134	A switched swing-up and stabilization control strategy for the rotating flywheel pendulum. , 2014, , .		1
135	Networked Control of Unstable Resonant Systems. , 2019, , .		1
136	Some issues on AI techniques in RT process control. Annual Reviews in Control, 1999, 23, 125-137.	7.9	1
137	Multirate Implementation of a Quasi-Sliding Mode Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 245-250.	0.4	0
138	Fuzzy PD Control of an Unstable System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 217-222.	0.4	0
139	Intelligent Use of Virtual Sensors in Control Applications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 213-225.	0.4	0
140	FUZZY CONTROLLERS WITH NON-CONVENTIONAL (SCARCE) MEASUREMENTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 217-222.	0.4	0
141	A STRAIGHTFORWARD PROPOSAL FOR LOW-COST DEVELOPMENT OF VIRTUAL AND REMOTE CONTROL LABORATORIES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 13-18.	0.4	0
142	Nonlinear Control of a Small Four-Rotor Rotorcraft. , 2005, , 147-177.		0
143	PID Control with Fuzzy Adaptation of a Metallurgical Furnace. , 2008, , 321-332.		0
144	Time invariant control of MIMO systems under random transient failures. , 2010, , .		0

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145	Stability analysis of linear systems with time-varying state and measurement delays. , 2014, , .		0
146	Control of disturbed systems with measurement delays: Application to quadrotor vehicles. , 2015, , .		0
147	Partial control of systems in series. , 2017, , .		0
148	Corrigendum to "Stabilizing Parametric Region of Multiloop PID Controllers for Multivariable Systems Based on Equivalent Transfer Function" Mathematical Problems in Engineering, 2017, 2017, 1-1.	1.1	0
149	Coordinated control strategy for a rotating flywheel pendulum. , 2018, , .		0
150	Trajectory Control in Non-Minimum Phase Plants. , 2021, , .		0
151	Lights and shadows of the Intelligent control. , 2007, , .		0
152	Control Co-design: Algorithms and Their Implementation. Lecture Notes in Computer Science, 2010, , 19-40.	1.3	0
153	Perspectives of Multivariable Fuzzy Control. , 2011, , 283-314.		0
154	Sampled data passive systems. Lecture Notes in Computer Science, 1994, , 118-130.	1.3	0
155	Discrete Time Control of a Mobile Robot. , 2020, , 33-53.		0
156	Linear Algebra-Based Controller Implementation Issues. , 2020, , 117-127.		0
157	Application to a Mobile Robot. , 2020, , 23-32.		0
158	Some issues about conditional stability in LTI plants. IFAC Journal of Systems and Control, 2020, 13, 100107.	1.7	0
159	Plant model frequency scale decomposition for identification and control design. , 2021, , .		0