InÃ©s Tejado

List of Publications by Year
in descending order

94 papers	904 citations	516215 16 h-index	552369 26 g-index
97 all docs	97 docs citations	97 times ranked	800 citing authors

#	Article	IF	Citations
1	Improved fractional Kalman filter and its application to estimation over lossy networks. Signal Processing, 2011, 91, 542-552.	2.1	67
2	Experimental Application of Hybrid Fractional-Order Adaptive Cruise Control at Low Speed. IEEE Transactions on Control Systems Technology, 2014, 22, 2329-2336.	3.2	56
3	Fractional-order reset control: Application to a servomotor. Mechatronics, 2013, 23, 781-788.	2.0	55
4	Back to Basics: Meaning of the Parameters of Fractional Order PID Controllers. Mathematics, 2019, 7, 530.	1.1	46
5	Fractional calculus in economic growth modelling: the Spanish and Portuguese cases. International Journal of Dynamics and Control, 2017, 5, 208-222.	1.5	40
6	Stability of fractional order switching systems. Computers and Mathematics With Applications, 2013, 66, 585-596.	1.4	38
7	Fractional order human arm dynamics with variability analyses. Mechatronics, 2013, 23, 805-812.	2.0	37
8	Stable force control and contact transition of a single link flexible robot using a fractional-order controller. ISA Transactions, 2019, 89, 139-157.	3.1	34
9	Adaptive projective synchronization for time-delayed fractional-order neural networks with uncertain parameters and its application in secure communications. Transactions of the Institute of Measurement and Control, 2018, 40, 3078-3087.	1.1	28
10	Adaptive projective synchronization for fractional-order T-S fuzzy neural networks with time-delay and uncertain parameters. Optik, 2017, 129, 140-152.	1.4	24
11	Fractional Calculus in Economic Growth Modelling of the Group of Seven. Fractional Calculus and Applied Analysis, 2019, 22, 139-157.	1.2	24
12	Identifying a non-commensurable fractional transfer function from a frequency response. Signal Processing, 2015, 107, 254-264.	2.1	22
13	Low-cost Hardware-in-the-loop Testbed of a Mobile Robot to Support Learning in Automatic Control and Robotics**This work has been supported by the Spanish Ministry of Economy and Competitiveness under the project DPI2012-37062-C02-02 and the Junta de Extremadura under the Ayuda a Grupos with reference GR15178.. IFAC-PapersOnLine, 2016, 49, 242-247.	0.5	21
14	Boolean-based fractional order SMC for switching systems: application to a DC-DC buck converter. Signal, Image and Video Processing, 2012, 6, 445-451.	1.7	20
15	Adaptive gain-order fractional control for network-based applications. Fractional Calculus and Applied Analysis, 2014, 17, 462-482.	1.2	20
16	Fractional Network-Based Control for Vehicle Speed Adaptation via Vehicle-to-Infrastructure Communications. IEEE Transactions on Control Systems Technology, 2013, 21, 780-790.	3.2	17
17	Fractional calculus in economic growth modeling. The Portuguese case. , 2014, , .		16
18	A General Form for Reset Control Including Fractional Order Dynamics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2028-2033.	0.4	16

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19	Reliable ${L_{2}} - {L_{infty}}$ State Estimation for Markovian Jump Reaction-Diffusion Neural Networks With Sensor Saturation and Asynchronous Failure. IEEE Access, 2018, 6, 50066-50076.	2.6	15
20	Fractional Derivatives for Economic Growth Modelling of the Group of Twenty: Application to Prediction. Mathematics, 2020, 8, 50.	1.1	15
21	Low Speed Control of an Autonomous Vehicle by Using a Fractional PI Controller. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 15025-15030.	0.4	14
22	Multi-switching adaptive synchronization of two fractional-order chaotic systems with different structure and different order. International Journal of Control, Automation and Systems, 2017, 15, 1524-1535.	1.6	14
23	A method for the design of robust controllers ensuring the quadratic stability for switching systems. JVC/Journal of Vibration and Control, 2014, 20, 1085-1098.	1.5	13
24	Synchronization of Two Fractional-Order Chaotic Systems via Nonsingular Terminal Fuzzy Sliding Mode Control. Journal of Control Science and Engineering, 2017, 2017, 1-11.	0.8	12
25	Low speed control of an autonomous vehicle using a hybrid fractional order controller. , 2011, , .		11
26	Multivariable fractional order PID controller design via LMI approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13960-13965.	0.4	11
27	Efficient control of a SmartWheel via Internet with compensation of variable delays. Mechatronics, 2013, 23, 821-827.	2.0	10
28	Output feedback control for fractional-order Takagiâ€“Sugeno fuzzy systems with unmeasurable premise variables. Transactions of the Institute of Measurement and Control, 2016, 38, 1201-1211.	1.1	10
29	Thereâ€™s Plenty of Fractional at the Bottom, I: Brownian Motors and Swimming Microrobots. Fractional Calculus and Applied Analysis, 2016, 19, 1282-1291.	1.2	9
30	Mixed $H\hat{~}$ and passive projective synchronization for fractional-order memristor-based neural networks with time delays via adaptive sliding mode control. Modern Physics Letters B, 2017, 31, 1750160.	1.0	9
31	Cardiovascular Circulatory System and Left Carotid Model: A Fractional Approach to Disease Modeling. Fractal and Fractional, 2022, 6, 64.	1.6	9
32	Auto-tuning of fractional order PIÂ·DÂ· controllers using a PLC. , 2009, , .		8
33	Adaptive interval type-2 fuzzy sliding modeÂcontrol for fractional-order systems based on finite-time scheme. Journal of Intelligent and Fuzzy Systems, 2017, 32, 1903-1915.	0.8	8
34	Physical Modeling based Simulators to Support Teaching in Automatic Control: the Rotatory Pendulum**This work has been supported by the Spanish Ministry of Economy and Competitiveness under the project DPI2012-37062-C02-02 and the Junta de Extremadura under the Ayuda a Grupos with reference GR15178.. IFAC-PapersOnLine, 2016, 49, 75-80.	0.5	7
35	Augmentation: Application to a Servomotor * *This work has been partially supported by the FEDER Funds (Programa Operativo FEDER de Extremadura 2014-2020) through the grant â€œAyuda a Grupos de InvestigaciÃ³nâ€•(ref. GR15178) of the Junta de Extremadura and by the Spanish Ministry of Economy and Competitiveness under the project with reference DPI2016-80547-R.. IFAC-PapersOnLine, 2017, 50, 15195-15200.	0.5	7
36	Mixed $$H_\infty$$ H â€ž /Passive Projective Synchronization for Nonidentical Uncertain Fractional-Order Neural Networks Based on Adaptive Sliding Mode Control. Neural Processing Letters, 2018, 47, 443.	2.0	7

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37	Effects of a communication network on the longitudinal and lateral control of an AGV. , 2008, , .		6
38	GPC strategies for the lateral control of a networked AGV. , 2009, , .		6
39	DEALING WITH FRACTIONAL DYNAMICS OF IP NETWORK DELAYS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250089.	0.7	6
40	EXPERIENCES ON AN INTERNET LINK CHARACTERIZATION AND NETWORKED CONTROL OF A SMART WHEEL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1230015.	0.7	6
41	Fractional Calculus in Economic Growth Modelling: The Spanish Case. Lecture Notes in Electrical Engineering, 2015, , 449-458.	0.3	6
42	Basic properties and stability of fractional-order reset control systems. , 2013, , .		6
43	Comparing Fractional Order PI Controllers With Variable Gain and Gain-Order for the Networked Control of a Servomotor. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 655-660.	0.4	5
44	Projective synchronization for two nonidentical time-delayed fractional-order Tâ€"S fuzzy neural networks based on mixed $${H_\infty }$$ H âˆž /passive adaptive sliding mode control. International Journal of Machine Learning and Cybernetics, 2019, 10, 799-812.	2.3	5
45	Modeling and Control of IPMC-Based Artificial Eukaryotic Flagellum Swimming Robot: Distributed Actuation. Algorithms, 2022, 15, 181.	1.2	5
46	Bounded control strategies for minimizing the effects of the communications network on the lateral control of an AGV. , 2008, , .		4
47	Fully Automated Tuning and Implementation of Fractional PID Controllers. , 2009, , .		4
48	Fractional Gain Scheduled Controller for a Networked Smart Wheel: Experimental Results. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 15043-15048.	0.4	4
49	Remote output feedback stabilization for fractional-order systems via communication networks. , 2011, , .		4
50	Iterative Learning and Fractional Reset Control. , 2015, , .		4
51	Fractional direct and inverse models of the dynamics of a human arm. JVC/Journal of Vibration and Control, 2016, 22, 2240-2254.	1.5	4
52	A comparative study of planar waveforms for propulsion of a joined artificial bacterial flagella swimming robot. , 2017, , .		4
53	Improved Locomotion of an AEF Swimming Robot Using Fractional Order Control. , 2019, , .		4
54	Effects of Introducing Fractional Dynamics in Hill's Model for Muscle Contraction. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1743-1748.	0.4	3

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55	Artificial Flagellum Microrobot. Design and Simulation in COMSOL. Advances in Intelligent Systems and Computing, 2018, , 491-501.	0.5	3
56	Performance study of propulsion of N-link artificial Eukaryotic flagellum swimming microrobot within a fractional order approach: From simulations to hardware-in-the-loop experiments. European Journal of Control, 2021, 58, 340-356.	1.6	3
57	Remote stabilization for fractional-order systems via communication networks. , 2010, , .		2
58	Controller for urban intersections based on hybrid automaton. , 2010, , .		2
59	Hybrid Modeling and Fractional Control of a SCKAFO Orthosis for Gait Assistance. , 2011, , .		2
60	Hybrid systems and control with fractional dynamics (II): Control. , 2014, , .		2
61	Hybrid systems and control with fractional dynamics (I): Modeling and analysis. , 2014, , .		2
62	Mixed H_∞ and Passive Projective Synchronization for Fractional Order Memristor-Based Neural Networks with Time-Delay and Parameter Uncertainty. Communications in Theoretical Physics, 2017, 68, 483.	1.1	2
63	Comparing Classical and Fractional Order Control Strategies of a Cardiovascular Circulatory System Simulator. IFAC-PapersOnLine, 2018, 51, 48-53.	0.5	2
64	Testing non reciprocal motion of a swimming flexible small robot with single actuation. , 2018, , .		2
65	Introducing systems theory with virtual laboratories at the University of Extremadura: How to improve learning in the lab in engineering degrees. International Journal of Electrical Engineering and Education, 2019, , 002072091987681.	0.4	2
66	A laboratory for teaching process control: The wastewater treatment plant. International Journal of Electrical Engineering and Education, 2020, , 002072091989756.	0.4	2
67	DESIGN OF AN ESCAPE ROOM TO SUPPORT LEARNING OF INDUSTRIAL PROCESS CONTROL IN ENGINEERING DEGREES. INTED Proceedings, 2021, , .	0.0	2
68	Fractional order identification of human arm dynamics: Preliminary results. , 2013, , .		2
69	Vibration Suppression Controller for a Flexible Beam on a Cart Using SMC. Advances in Intelligent Systems and Computing, 2014, , 127-139.	0.5	2
70	Comparing Generalized Order PID Controllers for Networked Control Systems With Random Delays and Data Dropouts. , 2009, , .		1
71	Fractional Approach for Estimating Sap Velocity in Trees. Fractional Calculus and Applied Analysis, 2015, 18, 479-494.	1.2	1
72	Frequency Domain Based Fractional Order Modeling of IPMC Actuators for Control. , 2019, , .		1

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73	Fractional modeling of flexural behavior of toenail plates: First step for clinical purposes. Medical Engineering and Physics, 2021, 90, 23-32.	0.8	1
74	Purcell's Three-Link Swimmer: Assessment of Geometry and Gaits for Optimal Displacement and Efficiency. Mathematics, 2021, 9, 1088.	1.1	1
75	CONTROLLER DESIGN FOR A STANCE-CONTROL KNEE-ANKLE-FOOT ORTHOSIS BASED ON OPTIMIZATION TECHNIQUES. , 2012, , .		1
76	Position and Velocity Control of a Servo by Using GPC of Arbitrary Real Order. , 2010, , 369-376.		1
77	Direct and Inverse Models of Human Arm Dynamics. , 2015, , .		1
78	PHYSICAL MODELING BASED SIMULATORS TO SUPPORT LABORATORY LEARNING IN AUTOMATIC CONTROL AND ROBOTICS. , 2016, , .		1
79	Modelling Cardiovascular Diseases withÂFractional-Order Derivatives. Lecture Notes in Networks and Systems, 2022, , 52-57.	0.5	1
80	Fractional order hybrid systems and their stability. , 2013, , .		0
81	Fractional models for measuring sap velocities in trees. , 2014, , .		0
82	Fractional disturbance observer for vibration suppression of a beam-cart system. , 2014, , .		0
83	Loop transfer recovery for fractional order control systems. First results. , 2016, , .		0
84	Nonlinear control methods. , 2019, , 1-28.		0
85	Modeling Mechanical Impedance of Environment in Flexible Robotics Applications. , 2019, , .		0
86	TEACHING AUTOMATIC CONTROL IN ENGINEERING DEGREES IN THE COVID-19 ERA: SIMULATORS BASED ON PHYSICAL MODELING TOOLS AS ALTERNATIVE. , 2021, , .		0
87	VIRTUAL LABORATORIES TO SUPPORT LEARNING IN INTRODUCTORY AUTOMATIC CONTROL COURSES: THE UNIVERSITY OF EXTREMADURA PILOT EXPERIENCE. , 2016, , .		0
88	FIRST STEPS IN THE INTRODUCTION OF AUTOMATIC EVALUATION IN VIRTUAL LABORATORIES FOR CONTROL ENGINEERING. , 2018, , .		0
89	A WEB-BASED VIRTUAL CONTROL LABORATORY OF THE INVERTED PENDULUM. INTED Proceedings, 2018, , .	0.0	0
90	SHARING BEST PRACTICES AND CONSIDERATIONS ON INTERACTIVE TOOLS IN ENGINEERING EDUCATION. EDULEARN Proceedings, 2019, , .	0.0	0

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91	INDUSTRIAL PROCESS CONTROL EDUCATION WITH A WASTEWATER TREATMENT PLANT. , 2019, , .		0
92	Evaluating an AEF Swimming Microrobot Using a Hardware-in-the-loop Testbed. Advances in Intelligent Systems and Computing, 2020, , 524-536.	0.5	0
93	Purcell's three-link microswimmer based on IPMC: Simulations in COMSOL Multiphysics. IEEE Latin America Transactions, 2022, 20, 474-480.	1.2	0
94	CART-PENDULUM PLATFORM IN CONTROL LEARNING IN ENGINEERING: FIRST STEPS TO CREATE ITS DIGITAL TWIN. EDULEARN Proceedings, 2022, , .	0.0	0