

Andrea MonteriÃ¹

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/185910/publications.pdf>

Version: 2024-02-01

170
papers

1,830
citations

393982

19
h-index

377514

34
g-index

176
all docs

176
docs citations

176
times ranked

1724
citing authors

#	ARTICLE	IF	CITATIONS
1	Digital Twin Reference Model Development to Prevent Operators' Risk in Process Plants. Sustainability, 2020, 12, 1088.	1.6	116
2	Statistical Spectral Analysis for Fault Diagnosis of Rotating Machines. IEEE Transactions on Industrial Electronics, 2018, 65, 4301-4310.	5.2	110
3	An Actuator Failure Tolerant Control Scheme for an Underwater Remotely Operated Vehicle. IEEE Transactions on Control Systems Technology, 2011, 19, 1036-1046.	3.2	84
4	Real time indoor localization integrating a model based pedestrian dead reckoning on smartphone and BLE beacons. Journal of Ambient Intelligence and Humanized Computing, 2019, 10, 1-12.	3.3	64
5	Respiratory rate detection algorithm based on RGB camera: theoretical background and experimental results. Healthcare Technology Letters, 2014, 1, 81-86.	1.9	58
6	The KIMORE Dataset: Kinematic Assessment of Movement and Clinical Scores for Remote Monitoring of Physical Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1436-1448.	2.7	58
7	Hybrid Deep Learning (hDL)-Based Brain-Computer Interface (BCI) Systems: A Systematic Review. Brain Sciences, 2021, 11, 75.	1.1	54
8	Dynamic surface fault tolerant control for underwater remotely operated vehicles. ISA Transactions, 2018, 78, 10-20.	3.1	53
9	A Diagnostic Tau Observer for a Class of Unmanned Vehicles. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 67, 61-73.	2.0	52
10	A Smart Sensing Architecture for Domestic Monitoring: Methodological Approach and Experimental Validation. Sensors, 2018, 18, 2310.	2.1	45
11	A Hidden Semi-Markov Model based approach for rehabilitation exercise assessment. Journal of Biomedical Informatics, 2018, 78, 1-11.	2.5	40
12	Actuator fault detection system for a mini-quadrotor. , 2010, , .		37
13	Dual-arm cooperative manipulation under joint limit constraints. Robotics and Autonomous Systems, 2018, 99, 110-120.	3.0	36
14	Fault Detection for Linear Periodic Systems Using a Geometric Approach. IEEE Transactions on Automatic Control, 2009, 54, 1637-1643.	3.6	33
15	Measurement of Users' Well-Being Through Domestic Sensors and Machine Learning Algorithms. IEEE Sensors Journal, 2020, 20, 8029-8038.	2.4	28
16	Model-Based Sensor Fault Detection and Isolation System for Unmanned Ground Vehicles: Theoretical Aspects (part I). Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	27
17	A Smart Lighting System for Visual Comfort and Energy Savings in Industrial and Domestic Use. Electric Power Components and Systems, 2015, 43, 1696-1706.	1.0	27
18	A smart lighting system for industrial and domestic use. , 2013, , .		26

#	ARTICLE	IF	CITATIONS
19	A novel LDA-based approach for motor bearing fault detection. , 2015, , .		22
20	Fault Detection and Isolation of Linear Discrete-Time Periodic Systems Using the Geometric Approach. IEEE Transactions on Automatic Control, 2017, 62, 1518-1523.	3.6	21
21	A life cycle costing of compacted lithium titanium oxide batteries for industrial applications. Journal of Power Sources, 2019, 436, 226837.	4.0	20
22	Redundancy analysis of cooperative dual-arm manipulators. International Journal of Advanced Robotic Systems, 2016, 13, 172988141665775.	1.3	19
23	Real-Time Model-Based Fault Detection and Isolation for UGVs. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 56, 425-439.	2.0	18
24	Actuator fault detection and isolation system for an hexacopter. , 2014, , .		18
25	An Integrated Simulation Module for Cyber-Physical Automation Systems. Sensors, 2016, 16, 645.	2.1	18
26	A functional source separation algorithm to enhance error-related potentials monitoring in noninvasive brain-computer interface. Computer Methods and Programs in Biomedicine, 2020, 191, 105419.	2.6	18
27	Cyber-physical system integration for industry 4.0: Modelling and simulation of an induction heating process for aluminium-steel molds in footwear soles manufacturing. , 2017, , .		17
28	Safe flying for an UAV helicopter. , 2007, , .		16
29	Reduced-Order Quadratic Kalman-Like Filtering of Non-Gaussian Systems. IEEE Transactions on Automatic Control, 2013, 58, 1744-1757.	3.6	16
30	SLAM-based autonomous wheelchair navigation system for AAL scenarios. , 2014, , .		16
31	Implementation of an "eat-home" e-Health system using heterogeneous devices. , 2016, , .		16
32	A Model-based Active Fault Tolerant Control Scheme for a Remotely Operated Vehicle. IFAC-PapersOnLine, 2018, 51, 798-805.	0.5	16
33	Stress Detection in Computer Users From Keyboard and Mouse Dynamics. IEEE Transactions on Consumer Electronics, 2021, 67, 12-19.	3.0	16
34	Experimental Validation of a Real-Time Model-Based Sensor Fault Detection and Isolation System for Unmanned Ground Vehicles. , 2006, , .		15
35	A Model-Based Fault Diagnosis System for Unmanned Aerial Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 71-76.	0.4	14
36	A coordination architecture for UUV fleets. Intelligent Service Robotics, 2012, 5, 133-146.	1.6	13

#	ARTICLE	IF	CITATIONS
37	An Open and Modular Hardware Node for Wireless Sensor and Body Area Networks. Journal of Sensors, 2016, 2016, 1-16.	0.6	13
38	Fault Tolerant Control Scheme for Robotic Manipulators Affected by Torque Faults. IFAC-PapersOnLine, 2018, 51, 886-893.	0.5	13
39	Improving mobility and autonomy of disabled users via cooperation of assistive robots. , 2018, , .		12
40	Health@Home: pilot cases and preliminary results : Integrated residential sensor network to promote the active aging of real users. , 2018, , .		12
41	Augmented Reality Smart Glasses in the Workplace: Safety and Security in the Fourth Industrial Revolution Era. Lecture Notes in Computer Science, 2020, , 231-247.	1.0	12
42	Navigation system for a smart wheelchair. Journal of Zhejiang University Science B, 2005, 6A, 110-117.	0.4	12
43	Cooperative control of underwater glider fleets by fault tolerant decentralized MPC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 16021-16026.	0.4	11
44	A Virtual Thruster-Based Failure Tolerant Control Scheme for Underwater Vehicles. IFAC-PapersOnLine, 2015, 48, 146-151.	0.5	11
45	A QR-code localization system for mobile robots: Application to smart wheelchairs. , 2017, , .		11
46	A Smart Home Services Demonstration: Monitoring, Control and Security Services Offered to the User. , 2018, , .		11
47	Fault detection of a VTOL UAV using Acceleration Measurements. , 2019, , .		11
48	Decision support methodologies and day-ahead optimization for smart building energy management in a dynamic pricing scenario. Energy and Buildings, 2020, 216, 109963.	3.1	11
49	Fault Diagnosis of Rotating Machinery Based on Wasserstein Distance and Feature Selection. IEEE Transactions on Automation Science and Engineering, 2022, 19, 1997-2007.	3.4	11
50	Arc fault detection and appliances classification in AC home electrical networks using recurrence quantification plots and image analysis. Electric Power Systems Research, 2021, 201, 107503.	2.1	11
51	Model-Based Sensor Fault Detection and Isolation System for Unmanned Ground Vehicles: Experimental Validation (part II). Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	10
52	AAL Technologies for Independent Life of Elderly People. Biosystems and Biorobotics, 2015, , 329-343.	0.2	10
53	Robotics in Education: A Smart and Innovative Approach to the Challenges of the 21st Century. Lecture Notes in Networks and Systems, 2021, , 17-26.	0.5	10
54	An actuator failure tolerant robust control approach for an underwater Remotely Operated Vehicle. , 2011, , .		9

#	ARTICLE	IF	CITATIONS
55	Fall Detection System by Using Ambient Intelligence and Mobile Robots. , 2018, , .		9
56	A Preliminary Study of a Cyber Physical System for Industry 4.0: Modelling and Co-Simulation of an AGV for Smart Factories. , 2018, , .		9
57	Actuator Fault-Tolerant Control Architecture for Multirotor Vehicles in Presence of Disturbances. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 99, 859-874.	2.0	9
58	Complex activity recognition system based on cascade classifiers and wearable device data. , 2018, , .		8
59	Fault Detection, Diagnosis and Fault Tolerant Output Control for a Remotely Operated Vehicle. , 2018, , .		8
60	LS-SVM for LPV-ARX Identification: Efficient Online Update by Low-Rank Matrix Approximation. , 2020, , .		8
61	Actuator Fault Detection System for a Remotely Operated Vehicle. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 356-361.	0.4	7
62	A detection-estimation approach to filtering with intermittent observations with generally correlated packet dropouts. , 2015, , .		7
63	A Nonlinear System with Coupled Switching Surfaces for Remotely Operated Vehicle Control. IFAC-PapersOnLine, 2016, 49, 311-316.	0.5	7
64	An Avoidance Control Strategy for Joint-Position Limits of Dual-Arm Robots. IFAC-PapersOnLine, 2017, 50, 1056-1061.	0.5	7
65	Real-time fall detection system by using mobile robots in smart homes. , 2017, , .		7
66	Biological age estimation using an eHealth system based on wearable sensors. Journal of Ambient Intelligence and Humanized Computing, 2021, 12, 4449-4460.	3.3	7
67	Optimal error governor for PID controllers. International Journal of Systems Science, 2021, 52, 2480-2492.	3.7	7
68	Augmenting robot intelligence via EEG signals to avoid trajectory planning mistakes of a smart wheelchair. Journal of Ambient Intelligence and Humanized Computing, 2023, 14, 223-235.	3.3	7
69	Nonlinear Decentralized Model Predictive Control for Unmanned Vehicles Moving in Formation. Information Technology and Control, 2015, 44, .	1.1	7
70	MODEL-BASED SENSOR FAULT DETECTION SYSTEM FOR A SMART WHEELCHAIR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 269-274.	0.4	6
71	A Fault Diagnosis and Prognosis LED Lighting System for Increasing Reliability in Energy Efficient Buildings. , 2013, , .		6
72	Room occupancy detection: Combining RSS analysis and fuzzy logic. , 2016, , .		6

#	ARTICLE	IF	CITATIONS
73	Temperature control of an innovative aluminium-steel molds induction preheat process placed on automated laser guided vehicles. , 2017, , .		6
74	A robust and self-tuning speed control for permanent magnet synchronous motors via meta-heuristic optimization. International Journal of Advanced Manufacturing Technology, 2018, 96, 1283-1292.	1.5	6
75	A Constrained Thrust Allocation Algorithm for Remotely Operated Vehicles. IFAC-PapersOnLine, 2018, 51, 250-255.	0.5	6
76	Collaborative design of a telerehabilitation system enabling virtual second opinion based on fuzzy logic. IET Computer Vision, 2018, 12, 502-512.	1.3	6
77	Actuator Fault Tolerant Control of Variable Pitch Quadrotor Vehicles. IFAC-PapersOnLine, 2020, 53, 4095-4102.	0.5	6
78	Experimental Validation of a Real-Time Model-Based Sensor Fault Detection and Isolation System for Unmanned Ground Vehicles. , 2006, , .		6
79	Comparing between Different Sets of Preprocessing, Classifiers, and Channels Selection Techniques to Optimise Motor Imagery Pattern Classification System from EEG Pattern Recognition. Brain Sciences, 2022, 12, 57.	1.1	6
80	Observer-based Fault Tolerant Sliding Mode Control for Remotely Operated Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 173-178.	0.4	5
81	Cooperative and decentralized navigation of autonomous underwater gliders using predictive control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 12813-12818.	0.4	5
82	A novel RSSI based approach for human indoor localization: The Fuzzy Discrete Multilateration. , 2016, , .		5
83	An adaptive VSS control for remotely operated vehicles. International Journal of Adaptive Control and Signal Processing, 2017, 31, 507-521.	2.3	5
84	Particle Swarm Optimization Based Sliding Mode Control Design: Application to a Quadrotor Vehicle. Studies in Computational Intelligence, 2017, , 143-169.	0.7	5
85	Human-robot cooperation via brain computer interface. , 2017, , .		5
86	Cooperative Robots Architecture for an Assistive Scenario. , 2018, , .		5
87	A geometric approach to Fault Detection and Isolation Problem for linear periodic systems. , 2010, , .		4
88	Geometric tools for solving the FDI problem for linear periodic discrete-time systems. International Journal of Control, 2013, 86, 1214-1226.	1.2	4
89	An integrated simulation environment for Wireless Sensor Networks. , 2015, , .		4
90	A kinematic joint fault tolerant control based on relative jacobian method for dual arm manipulation systems. , 2016, , .		4

#	ARTICLE	IF	CITATIONS
91	A thruster failure tolerant control scheme for underwater vehicles. , 2016, , .		4
92	Dynamic Surface Control for Multirotor Vehicles. , 2018, , .		4
93	Actuator Fault Tolerant Position Control of a Quadrotor Unmanned Aerial Vehicle. , 2019, , .		4
94	Human-Robot Cooperation via Brain Computer Interface in Assistive Scenario. Lecture Notes in Electrical Engineering, 2019, , 115-131.	0.3	4
95	System Thinking Approach for Digital Twin Analysis. , 2020, , .		4
96	Autonomous Assistive Robot for Respiratory Rate Detection and Tracking. , 2014, , 61-72.		4
97	Sparse Approximation of LS-SVM for LPV-ARX Model Identification: Application to a Powertrain Subsystem. , 2020, , .		4
98	rapros: A ROS Package for Rapid Prototyping. Studies in Computational Intelligence, 2016, , 491-508.	0.7	4
99	Actuator Failure Tolerant Control Design for Underwater Remotely Operated Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 25-30.	0.4	3
100	A low cost mobile platform for educational robotic applications. , 2014, , .		3
101	A detection-estimation approach to filtering for Gaussian systems with intermittent observations. , 2014, , .		3
102	Active Fault Tolerant Control of Remotely Operated Vehicles via Control Effort Redistribution. , 2017, , .		3
103	A Parametric Optimization Approach of an Induction Heating System for Energy Consumption Reduction. , 2017, , .		3
104	Fault-Tolerant Disturbance Observer Based Control for Altitude and Attitude Tracking of a Quadrotor. , 2018, , .		3
105	Cyber-Physical Manufacturing Systems for Industry 4.0: Architectural Approach and Pilot Case. , 2019, , .		3
106	Special Issue on "Smart Homes" Editors' Notes. Sensors, 2019, 19, 836.	2.1	3
107	Smart Monitoring of User and Home Environment: The Health@Home Acquisition Framework. Lecture Notes in Electrical Engineering, 2019, , 23-37.	0.3	3
108	Towards the Design of a Machine Learning-based Consumer Healthcare Platform powered by Electronic Health Records and measurement of Lifestyle through Smartphone Data. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
109	Online Fault Detection: a Smart Approach for Industry 4.0. , 2020, , .		3
110	Machine Learning-as-a-Service for Consumer Electronics Fault Diagnosis: a Comparison between Matlab and Azure ML. , 2020, , .		3
111	A Non-invasive Method for Biological Age Estimation Using Frailty Phenotype Assessment. Lecture Notes in Electrical Engineering, 2019, , 81-94.	0.3	3
112	Human Indoor Localization for AAL Applications: An RSSI Based Approach. Lecture Notes in Electrical Engineering, 2017, , 239-250.	0.3	3
113	Convolutional Recurrent Neural Networks and Acoustic Data Augmentation for Snore Detection. Smart Innovation, Systems and Technologies, 2020, , 35-46.	0.5	3
114	ON-LINE SENSOR FAULT DETECTION SYSTEM FOR A SMART WHEELCHAIR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 91-96.	0.4	2
115	A geometric approach to fault detection of periodic systems. , 2007, , .		2
116	Residual generation approaches in navigation sensors fault detection applications. , 2007, , .		2
117	An Actuator Failure Tolerant Approach for Underwater Remotely Operated Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 267-272.	0.4	2
118	Fault tolerant decentralized nonlinear MPC for fleets of unmanned marine vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 348-353.	0.4	2
119	Reduced-order quadratic Kalman-like filtering for non-Gaussian systems. , 2012, , .		2
120	Optimal reduced-order quadratic solution for the non-Gaussian finite-horizon regulator problem. , 2013, , .		2
121	An integrated simulation module for wireless cyber-physical system. , 2015, , .		2
122	Modelling and hardware-in-the-loop simulation for energy management in induction cooktops. , 2017, , .		2
123	Kinematic Fault Tolerant Control of a Dual-Arm Robotic System Under Torque Faults. , 2018, , .		2
124	First Approach to a Holistic Tool for Assessing RES Investment Feasibility. Sustainability, 2018, 10, 1153.	1.6	2
125	Octarotor Fault Tolerant Control via Dynamic Surface Control. , 2019, , .		2
126	Direct position control of an octarotor unmanned vehicle under wind gust disturbance. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
127	A Machine-Learning Based Emotion Recognition System in Patients with Parkinson's Disease. , 2019, , .		2
128	ErrP Signals Detection for Safe Navigation of a Smart Wheelchair. , 2019, , .		2
129	A nonlinear optimal control approach for the autonomous octorotor. Advanced Control for Applications, 2020, 2, e50.	0.8	2
130	A Stress Detection System based on Multimedia Input Peripherals. , 2020, , .		2
131	Disturbance Observer Based Fault Tolerant Control for Tilted Hexarotors. , 2021, , .		2
132	Low Cost RGB-D Vision Based System to Support Motor Disabilities Rehabilitation at Home. Biosystems and Biorobotics, 2015, , 449-461.	0.2	2
133	Training and Retraining Motor Functions at Home with the Help of Current Technology for Video Games: Basis for the Project. Biosystems and Biorobotics, 2015, , 439-447.	0.2	2
134	Cyber-physical manufacturing systems: An architecture for sensor integration, production line simulation and cloud services. Acta IMEKO (2012), 2020, 9, 39.	0.4	2
135	Optimal Fault Tolerant Error Governor for PID Controllers. International Journal of Control, Automation and Systems, 2022, 20, 1814-1826.	1.6	2
136	Development of a smart LED lighting system: Rapid prototyping scenario. , 2014, , .		1
137	A detection-estimation approach with refinement to filtering for Gaussian systems with intermittent observations. , 2016, , .		1
138	Wireless sensor network based management system for electric bicycle-sharing. , 2016, , .		1
139	Robust Control of a Photovoltaic Battery System via Fuzzy Sliding Mode Approach. Studies in Computational Intelligence, 2017, , 115-142.	0.7	1
140	Nonlinear control of a photovoltaic battery system via ABC-tuned Dynamic Surface Controller. , 2017, , .		1
141	A Variable Structure System Control and its Application in Underwater Vehicles. IFAC-PapersOnLine, 2017, 50, 7019-7026.	0.5	1
142	An automatic temperature control for induction cooktops to reduce energy consumption. , 2018, , .		1
143	Non intrusive load identification for smart energy management systems. , 2018, , .		1
144	Psychophysiological Stress Control via Heart Rate Entrainment. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
145	An Automated Procedure to Evaluate Usability of eHealth Platforms In The Wild. , 2019, , .		1
146	Design and Implementation of a Real-Time Upper Limbs Dyskinesia Detection System. , 2019, , .		1
147	Smart Homes and Assisted Living as an Additional Service Offered to the Users. , 2019, , .		1
148	Empowered Optical Inspection by Using Robotic Manipulator in Industrial Applications. , 2019, , .		1
149	Recurrence Quantification Analysis of Stator-Current Measurements for Electric Motor Fault Classification. , 2019, , .		1
150	Fault Tolerant Control for an Over-Actuated WAM-V Catamaran. IFAC-PapersOnLine, 2019, 52, 353-359.	0.5	1
151	Estimation of actuator faults in quadrotor vehicles: from theory to validation with experimental flight data. , 2020, , .		1
152	Analysis of LGV usage for the improvement of a customized production. Procedia Manufacturing, 2020, 51, 1606-1613.	1.9	1
153	Development and experimental validation of algorithms for human-robot interaction in simulated and real scenarios. Journal of Ambient Intelligence and Humanized Computing, 2021, 12, 4529-4539.	3.3	1
154	Autonomous Helicopter for Surveillance and Security. , 2007, , .		1
155	Neuromuscular Control Modelling of Human Perturbed Posture Through Piecewise Affine Autoregressive With Exogenous Input Models. Frontiers in Bioengineering and Biotechnology, 2021, 9, 804904.	2.0	1
156	AN ACTUATOR FAULT TOLERANT APPROACH FOR UNDERWATER REMOTELY OPERATED VEHICLES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 293-299.	0.4	0
157	The Role of ICT in the Italian Health Care System. Lecture Notes in Electrical Engineering, 2016, , 3-17.	0.3	0
158	Fault detection of nonlinear processes based on switching linear regression models. , 2016, , .		0
159	Upper and Lower Limbs Dyskinesia Detection for Patients with Parkinson's Disease. , 2018, , .		0
160	Hear to see - See to hear: a Smart Home System User Interface for visually or hearing-impaired people. , 2018, , .		0
161	Induction Mold Heating: Modelling and Hardware-in-the-Loop Simulation for Temperature Control. , 2018, , .		0
162	Energy Saving in Industrial Wireless Power Recharge System: Simulation of a PI-Sliding Mode Control for a Non-Inverting Buck-Boost Converter. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
163	A Gestures Recognition Based Approach for Human-Robot-Interaction. , 2018, , .		0
164	A Model-Based Approach to Support the Design of Mold Heating for Composites. Lecture Notes in Mechanical Engineering, 2019, , 391-401.	0.3	0
165	Architecture for Cooperative Interacting Robotic Systems Towards Assisted Living: A Preliminary Study. Lecture Notes in Electrical Engineering, 2019, , 471-486.	0.3	0
166	An Effective and Simple Adaptive Algorithm for Ship Course Control Systems. , 2019, , .		0
167	Constrained Control Allocation for a Remotely Operated Vehicle with Collective Azimuth Thrusters. , 2020, , .		0
168	Measuring Environmental Data and Physiological Parameters at Home to Assess the Caregiver Burden in Assistants of People with Dementia. Lecture Notes in Electrical Engineering, 2021, , 3-13.	0.3	0
169	Dual-Arm Manipulators Kinematic Control Under Multiple Constraints via Virtual Joints Approach. , 2019, , .		0
170	Day-Ahead Multi-Objective Energy Optimization of a Smart Building in a Dynamic Pricing Scenario. Springer Proceedings in Energy, 2020, , 195-205.	0.2	0