Wojciech Giernacki

List of Publications by Year
in descending order

49 papers	411 citations	1039406 9 h-index	1058022 14 g-index
51 all docs	51 docs citations	51 times ranked	313 citing authors

#	Article	IF	Citations
1	Crazyflie 2.0 quadrotor as a platform for research and education in robotics and control engineering. , 2017, , .		105
2	Performance of Coaxial Propulsion in Design of Multi-rotor UAVs. Advances in Intelligent Systems and Computing, 2016, , 523-531.	0.5	25
3	Position Control of Quadrotor UAV Based on Cascade Fuzzy Neural Network. Energies, 2022, 15, 1763.	1.6	20
4	A Nonlinear Filter for Efficient Attitude Estimation of Unmanned Aerial Vehicle (UAV). Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 95, 1079-1095.	2.0	17
5	Real-Time Model-Free Minimum-Seeking Autotuning Method for Unmanned Aerial Vehicle Controllers Based on Fibonacci-Search Algorithm. Sensors, 2019, 19, 312.	2.1	16
6	An Acoustic Fault Detection and Isolation System for Multirotor UAV. Energies, 2022, 15, 3955.	1.6	16
7	Estimation of Altitude and Vertical Velocity for Multirotor Aerial Vehicle Using Kalman Filter. Advances in Intelligent Systems and Computing, 2014, , 377-385.	0.5	15
8	Iterative Learning Method for In-Flight Auto-Tuning of UAV Controllers Based on Basic Sensory Information. Applied Sciences (Switzerland), 2019, 9, 648.	1.3	15
9	Mathematical Modeling of the Coaxial Quadrotor Dynamics for Its Attitude and Altitude Control. Energies, 2021, 14, 1232.	1.6	12
10	Real-time Implementation and Flight Tests using Linear and Nonlinear Controllers for a Fixed-wing Miniature Aerial Vehicle (MAV). International Journal of Control, Automation and Systems, 2018, 16, 392-396.	1.6	11
11	Thrust estimation by fuzzy modeling of coaxial propulsion unit for multirotor UAVs. , 2016, , .		9
12	PV System Design and Flight Efficiency Considerations for Fixed-Wing Radio-Controlled Aircraft—A Case Study. Energies, 2018, 11, 2648.	1.6	9
13	Optimal Tuning of the Lateral-Dynamics Parameters for Aerial Vehicles With Bounded Lateral Force. IEEE Robotics and Automation Letters, 2021, 6, 3949-3955.	3.3	9
14	Stability analysis and tracking performance of fractional-order PI controller for a second-order oscillatory system with time-delay. , 2016, , .		8
15	Cuttlefish Optimization Algorithm in Autotuning of Altitude Controller of Unmanned Aerial Vehicle (UAV). Advances in Intelligent Systems and Computing, 2018, , 841-852.	0.5	7
16	A Study on Coaxial Quadrotor Model Parameter Estimation: an Application of the Improved Square Root Unscented Kalman Filter. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 95, 491-510.	2.0	7
17	AL-TUNE: A Family of Methods to Effectively Tune UAV Controllers in In-flight Conditions. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 103, 1.	2.0	7
18	Trajectory Tracking with Adaptive Robust Control for Quadrotor. Applied Sciences (Switzerland), 2021, 11, 8571.	1.3	7

#	Article	IF	Citations
19	An adequate mathematical model of four-rotor flying robot in the context of control simu. Journal of Automation, Mobile Robotics and Intelligent Systems, 2014, 8, 9-16.	0.4	7
20	Unscented Kalman Filter for an orientation module of a quadrotor mathematical model. , 2013, , .		6
21	Particle swarm optimisation in nonlinear model predictive control; comprehensive simulation study for two selected problems. International Journal of Control, 2021, 94, 2623-2639.	1.2	6
22	Introduction of the Flying Robots into the Human Environment: An Adaptive Square-Root Unscented Kalman Filter for a Fault Tolerant State Estimation in a Quadrotor. , 2014, , .		5
23	Robust CDM and pole placement PID based thrust controllers for multirotor motor-rotor simplified model: The comparison in a context of using anti-windup compensation. , 2016, , .		5
24	Mathematical models database (MMD ver. 1.0) non-commercial proposal for researchers. , 2016, , .		5
25	MultiPDF particle filtering in state estimation of nonlinear objects. Nonlinear Dynamics, 2021, 106, 2165-2182.	2.7	5
26	Sea-Surface Target Visual Tracking with a Multi-Camera Cooperation Approach. Sensors, 2022, 22, 693.	2.1	5
27	Active Vibration Reduction System Optimal Control Using Linear Matrix Inequalities with No Directional Change in Controls. Asian Journal of Control, 2013, 15, 1571-1578.	1.9	4
28	Robust estimation algorithm of altitude and vertical velocity for multirotor UAVs. , 2016, , .		4
29	Influence of time delay on fractional-order PI-controlled system for a second-order oscillatory plant model with time delay. Archives of Electrical Engineering, 2017, 66, 693-704.	1.0	4
30	Stability region of a simplified multirotor motor–rotor model with time delay and fractional-order PD controller. Automatika, 2017, 58, 384-390.	1.2	4
31	Altitude Measurement-Based Optimization of the Landing Process of UAVs. Sensors, 2021, 21, 1151.	2.1	4
32	Speed Control of Drive Unit in Four-rotor Flying Robot. , 2013, , .		4
33	Hybrid Quasi-Optimal PID-SDRE Quadrotor Control. Energies, 2022, 15, 4312.	1.6	4
34	Near to optimal design of PIλDμ fractional-order speed controller (FOPID) for multirotor motor-rotor simplified model. , 2016, , .		3
35	Dynamic anti–windup compensator for fractional–order system with time–delay. Asian Journal of Control, 2020, 22, 1767-1781.	1.9	3
36	In-flight Efficient Controller Auto-tuning using a Pair of UAVs. , 2020, , .		2

#	Article	IF	Citations
37	Optimal Tuning of Altitude Controller Parameters of Unmanned Aerial Vehicle Using Iterative Learning Approach. Advances in Intelligent Systems and Computing, 2020, , 398-407.	0.5	2
38	Robust control with optimization of robustness index. , 2012, , .		1
39	Rotational speed control of multirotor UAV's propulsion unit based on fractional-order PI controller. , 2017, , .		1
40	Tracking performance of angular velocity in a servo system with fractional-order PI controller and anti-windup compensation. , 2017, , .		1
41	Evolutionary Based Tuning Approach of <tex>$ext{PI}^{lambda}mathrm{D}^{mu}$</tex> Fractional-Order Speed Controller for multirotor UAV. , 2018, , .		1
42	A New Network for Particle Filtering of Multivariable Nonlinear Objects â€. Energies, 2020, 13, 1355.	1.6	1
43	Fractional-Order PI Controller withÂAnti-windup Compensation forÂFirst Order Delay System. Advances in Intelligent Systems and Computing, 2018, , 26-35.	0.5	1
44	Robust Adaptive Control with the Use of DACDM Algorithm â€" Impact of Settings on Tracking Quality. Journal of Industrial and Intelligent Information, 2014, 3, .	0.1	1
45	New Grid for Particle Filtering of Multivariable Nonlinear Objects. , 0, , .		1
46	Active Disturbance Rejection Control of High-Order Flat Underactuated Systems: Mass-Spring Benchmark Problem. Advances in Intelligent Systems and Computing, 2020, , 1336-1347.	0.5	1
47	E-Learning and Comprehensive Education of Engineersin the EU. International Journal of Information and Education Technology, 2012, , 587-590.	0.9	0
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