

# Petru Dobra

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

219  
citations

1307594

7  
h-index

1199594

12  
g-index

65  
all docs

65  
docs citations

65  
times ranked

222  
citing authors

#	ARTICLE	IF	CITATIONS
1	Embedded application of fractional order control. Electronics Letters, 2012, 48, 1526-1528.	1.0	32
2	Control strategies for decreasing energy costs and increasing self-consumption in nearly zero-energy buildings. Sustainable Cities and Society, 2018, 39, 459-475.	10.4	25
3	$\hat{1}/4$ -Synthesis for Fractional-Order Robust Controllers. Mathematics, 2021, 9, 911.	2.2	16
4	Adaptive Control of Membrane Conductivity of PEM Fuel Cell. Procedia Technology, 2014, 12, 42-49.	1.1	15
5	Unified CACSD Toolbox for Hybrid Simulation and Robust Controller Synthesis with Applications in DC-to-DC Power Converter Control. Mathematics, 2021, 9, 731.	2.2	15
6	Krasovskii Passivity and $\hat{1}/4$ -Synthesis Controller Design for Quasi-Linear Affine Systems. Energies, 2021, 14, 5571.	3.1	13
7	Comparison between envelope detection methods for bearing defects diagnose. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 137-142.	0.4	11
8	An improvement on empirical modelling of the batteries. , 2009, , .		7
9	Comparison between analog and digital control of LLC converter. , 2010, , .		6
10	Rapid Control Prototyping educational toolbox for Scilab/Scicos. , 2009, , .		5
11	Efficient implementation of sliding mode control for BLDC PM motor using TMS320F28335 microcontroller. , 2014, , .		5
12	KNX Building Automations Interaction with City Resources Management System. Procedia Technology, 2014, 12, 212-219.	1.1	5
13	Design of a low cost CAD-CAM convertor for CNC applications. , 2016, , .		5
14	The implementation of an ARM-based low-power wireless process control system. , 2017, , .		4
15	Adaptive system identification and control using DSP for automotive power generation. , 2008, , .		3
16	Rapid Control Prototyping toolbox for Renesas M32C87 microcontroller. , 2010, , .		3
17	Model based approach in fault detection and diagnosis for DC motor. , 2011, , .		3
18	Simulation model of the bearings with defects. , 2012, , .		3

#	ARTICLE	IF	CITATIONS
19	The opportunity of energy arbitrage by using predictive control in a solar passive house. , 2016, , .		3
20	Dynamic temperature setpoint control as a strategy for reducing costs and energy consumption in nearly zero-energy buildings. , 2017, , .		3
21	Passivity-Based Controller for Nonideal DC-to-DC Boost Converter. , 2019, , .		3
22	Iterative Refinement Procedure for Solutions to Algebraic Riccati Equations. , 2020, , .		3
23	Digital Control of a Two Phase Motor. , 2007, , .		2
24	Torque measurement system design. , 2008, , .		2
25	Rapid control prototyping toolbox for the Stellaris LM3S8000 microcontrollers. , 2012, , .		2
26	Household Water Tank Temperature Control. Applied Mechanics and Materials, 2013, 436, 417-426.	0.2	2
27	Bearing defects diagnosis based on Gaussian filtering shock detection and power spectrum of envelope. , 2013, , .		2
28	Determining the Frequency Response of a DC-DC Converter thru System Identification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 149-152.	0.4	2
29	A new orthogonalization and sensor fusion algorithm for attitude estimation. , 2018, , .		2
30	Using Adaptive Transmit Power in Wireless Indoor Air Quality Monitoring. , 2019, , .		2
31	Robust controller for a brushless DC motor based on the gain and phase margin. , 0, , .		1
32	Effects of the small delays in robotic control systems. , 2006, , .		1
33	DSP based controller for battery charging system. , 2008, , .		1
34	Spectrum analyzer instrument based on OMAP3530. , 2012, , .		1
35	Energy efficient design and control for PEM water electrolyzer and hydrogen storage system. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 32-36.	0.4	1
36	Sensing and Control Strategies in Tracking Solar Systems. , 2015, , .		1

#	ARTICLE	IF	CITATIONS
37	Embedded speed control of BLDC motors using LPC1549 microcontroller. , 2016, , .		1
38	Notch filter sensitivity analysis with root locus considering parameter uncertainty. , 2016, , .		1
39	Nonlinear model and control of a quadcopter. , 2017, , .		1
40	Derivation of nonlinear mathematical model of two-wheeled inverted pendulum. , 2017, , .		1
41	Non-linear model, simulation and control of a new VTOL vehicle concept. , 2018, , .		1
42	An Autonomous Trajectory Generation Algorithm for Swarms of Quadcopter Drones. , 2019, , .		1
43	A new proof of Ackermann's formula from control theory. Studia Universitatis Babes-Bolyai Mathematica, 2017, 62, 325-329.	0.4	1
44	Worst-Case Execution Time Estimation for Numerical Controllers. , 2022, , .		1
45	Design of Controller for Nonlinear Systems by the Gain Scheduling Technique. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 413-417.	0.4	0
46	Stability of the Fast Voltage Control Loop in DC-DC Converters. , 2006, , .		0
47	Analysis of stability nonlinear systems with varying parameters using Popov criterion. , 2006, , .		0
48	E-book for evaluating core loss, different technique and materials. , 2008, , .		0
49	Low-cost embedded solution for auto-tuning DC motor controllers. , 2008, , .		0
50	Digital sliding mode control using low cost embedded solution. , 2010, , .		0
51	Low-cost SMC implementation for small mobile robot. , 2010, , .		0
52	Towards a Rapid Control Prototyping Toolbox for the Stellaris LM3S8000 Microcontrollers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1965-1970.	0.4	0
53	A proposed hardware design and control technique for solid polymer electrolyte water electrolyzer directly coupled with photovoltaic panels. , 2012, , .		0
54	Practical aspects of the system identification of a buck converter. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
55	Universal Communication Node for Building Automation Systems. Applied Mechanics and Materials, 2013, 436, 435-444.	0.2	0
56	Model based fault detection for electrical drives with BLDC motor. , 2014, , .		0
57	Control Loops Comparative Study Based on IR Thermal Imaging for Electrical Drives with BLDC PM Motors. , 2015, , .		0
58	Optimization of residential heating systems using accumulators. , 2015, , .		0
59	Channel Hopping in Wireless Process Control. , 2019, , .		0
60	Polynomial trajectory generation and tracking for linear systems. International Journal of Control, 2021, 94, 1893-1902.	1.9	0
61	Extended Nonideal Passivity Based Controller for DC-DC Boost Converter. , 2021, , .		0
62	A Novel 3D Body Attitude and Gyroscope Bias Estimator Algorithm. , 2021, , .		0
63	Closed-Loop System Sensitivity Analysis for Passivity-Based Controller Parameters. , 2022, , .		0