Damir Vrancic

List of Publications by Year in descending order

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65 papers	720 citations	687220 13 h-index	610775 24 g-index
67 all docs	67 docs citations	67 times ranked	381 citing authors

#	Article	IF	Citations
1	Reference Model Control of the Time Delayed Double Integrator. IEEE Access, 2022, 10, 39282-39298.	2.6	3
2	Tuning of PID Control for the Double Integrator Plus Dead Time Model by Modified Real Dominant Pole and Performance Portrait Methods. Mathematics, 2022, 10, 971.	1.1	15
3	Performance Portrait Method: An Intelligent PID Controller Design Based on a Database of Relevant Systems Behaviors. Sensors, 2022, 22, 3753.	2.1	8
4	Measurement System for Piezoelectric Resonance Impedance Spectroscopy Under Combined AC and High-Voltage DC Loading. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 3137-3144.	1.7	2
5	PID Control With Higher Order Derivative Degrees for IPDT Plant Models. IEEE Access, 2021, 9, 2478-2495.	2.6	28
6	Delay Equivalences in Tuning PID Control for the Double Integrator Plus Dead-Time. Mathematics, 2021, 9, 328.	1.1	12
7	A Set of Active Disturbance Rejection Controllers Based on Integrator Plus Dead-Time Models. Applied Sciences (Switzerland), 2021, 11, 1671.	1.3	10
8	Comparing traditional and constrained disturbance-observer based positional control. Measurement and Control, 2021, 54, 170-178.	0.9	3
9	Extending the Model-Based Controller Design to Higher-Order Plant Models and Measurement Noise. Symmetry, 2021, 13, 798.	1.1	13
10	2DOF IMC and Smith-Predictor-Based Control for Stabilised Unstable First Order Time Delayed Plants. Mathematics, 2021, 9, 1064.	1.1	7
11	High-Order Filtered PID Controller Tuning Based on Magnitude Optimum. Mathematics, 2021, 9, 1340.	1.1	14
12	Dead-Time Compensation for the First-Order Dead-Time Processes: Towards a Broader Overview. Mathematics, 2021, 9, 1519.	1.1	9
13	A Simple Analytical Method for Estimation of the Five-Parameter Model: Second-Order with Zero Plus Time Delay. Mathematics, 2021, 9, 1707.	1.1	2
14	Making the PI and PID Controller Tuning Inspired by Ziegler and Nichols Precise and Reliable. Sensors, 2021, 21, 6157.	2.1	34
15	Practical Validation of a Dual Mode Feedforward-Feedback Control Scheme in an Arduino Kit. Lecture Notes in Electrical Engineering, 2021, , 538-547.	0.3	0
16	Asymmetries in the Disturbance Compensation Methods for the Stable and Unstable First Order Plants. Symmetry, 2020, 12, 1595.	1.1	9
17	Parametric and Nonparametric PID Controller Tuning Method for Integrating Processes Based on Magnitude Optimum. Applied Sciences (Switzerland), 2020, 10, 6012.	1.3	3
18	Improving Noise Attenuation in Modified Filtered Smith Predictor. , 2020, , .		2

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19	Parametric and Nonparametric PI Controller Tuning Method for Integrating Processes Based on Magnitude Optimum. Applied Sciences (Switzerland), 2020, 10, 1443.	1.3	7
20	Active Disturbance Rejection Control for DC Motor Laboratory Plant Learning Object. Information (Switzerland), 2020, 11, 151.	1.7	1
21	State-Space Controller as a FOTD Based Generalization of ADRC. , 2020, , .		2
22	Refrigeration Control Algorithm for Managing Supermarketâ€™s Overall Peak Power Demand. IEEE Transactions on Control Systems Technology, 2019, 27, 2279-2286.	3.2	9
23	Demand-side improvement of short-term load forecasting using a proactive load managementÂâ€“Âa supermarket use case. Energy and Buildings, 2019, 186, 186-194.	3.1	13
24	Control system for automated drift compensation of the stand-alone charge amplifier used for low-frequency measurement. AIP Advances, 2019, 9, .	0.6	6
25	Optimizing the operation of a solid oxide fuel cell power system with a supervisory controller based on the extremum-seeking approach. Energy Conversion and Management, 2019, 187, 53-62.	4.4	2
26	ADRC as an Exercise for Modeling and Control Design in the State-Space. , 2019, , .		3
27	Feedforward-feedback control of a solid oxide fuel cell power system. International Journal of Hydrogen Energy, 2018, 43, 6352-6363.	3.8	31
28	The magnitude optimum tuning of the PID controller: Improving load disturbance rejection by extending the controller. Transactions of the Institute of Measurement and Control, 2018, 40, 1669-1680.	1.1	5
29	Swarm Design of Series PID Cascade Controllers. , 2018, , .		2
30	Optimizing Disturbance Rejection by Using Model-Based Compensator with User-Defined High-Frequency Gains. , 2018, , .		1
31	PIDm Control for IPDT Plants. Part 2: Setpoint Response. , 2018, , .		4
32	PIDmnControl for IPDT Plants. Part 1: Disturbance Response. , 2018, , .		5
33	PID controller tuning for integrating processes. IFAC-PapersOnLine, 2018, 51, 586-591.	0.5	7
34	Maximizing the Electrical Efficiency of a Solid Oxide Fuel Cell System. , 2018, , .		0
35	Recombination of oxygen atoms along a glass tube loaded with a copper sample. Vacuum, 2017, 138, 224-229.	1.6	7
36	Improving Operation of a 2.5kW SOFC Power System with Supervisory Control. ECS Transactions, 2017, 78, 265-274.	0.3	1

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37	Comparing filtered PID and smith predictor control of a thermal plant. , 2017, , .		11
38	Cost optimisation of supermarket refrigeration system with hybrid model. Applied Thermal Engineering, 2016, 103, 56-66.	3.0	16
39	A Novel Fast-Filtering Method for Rotational Speed of the BLDC Motor Drive Applied to Valve Actuator. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1479-1486.	3.7	9
40	Dual Mode Feedforward-Feedback Control System. Lecture Notes in Electrical Engineering, 2015, , 241-250.	0.3	2
41	Teaching particle swarm optimization through an openâ€loop system identification project. Computer Applications in Engineering Education, 2014, 22, 227-237.	2.2	10
42	A PLC-Based System for Advanced Control. Advances in Industrial Control, 2013, , 327-361.	0.4	0
43	Rapid Prototyping Environment for Control Systems Implementation. Advances in Industrial Control, 2013, , 289-326.	0.4	1
44	Temperature Control in a Plastic Extruder Control System. Advances in Industrial Control, 2013, , 157-183.	0.4	2
45	Anti-Sway System for Ship-to-Shore Cranes. Strojniski Vestnik/Journal of Mechanical Engineering, 2012, 58, 338-344.	0.6	8
46	Automatic detection of the truck position using stereoscopy. , 2012, , .		2
47	Underdamped Second-Order Systems Overshoot Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 518-523.	0.4	9
48	Improving disturbance rejection of PID controllers by means of the magnitude optimum method. ISA Transactions, 2010, 49, 47-56.	3.1	50
49	Multi-Objective Particle Swarm Optimization Design of PID Controllers. Lecture Notes in Computer Science, 2009, , 1222-1230.	1.0	8
50	Comparative study of decay ratios of disturbance-rejection magnitude optimum method for PI controllers. ISA Transactions, 2008, 47, 94-100.	3.1	3
51	Permanent synchronization of camcorders via LANC protocol. , 2006, 6055, 165.		0
52	Advanced control algorithms embedded in a programmable logic controller. Control Engineering Practice, 2006, 14, 935-948.	3.2	13
53	Improving disturbance rejection of PI controllers by means of the magnitude optimum method. ISA Transactions, 2004, 43, 73-84.	3.1	19
54	Improving Tracking Performance on Disturbance-Rejection Controllers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 41-46.	0.4	1

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55	Fuzzy gain-scheduling control of a gas-liquid separation plant implemented on a PLC. International Journal of Control, 2002, 75, 1082-1091.	1.2	16
56	A magnitude optimum multiple integration tuning method for filtered PID controller. Automatica, 2001, 37, 1473-1479.	3.0	71
57	A new modified Smith predictor: the concept, design and tuning. ISA Transactions, 2001, 40, 111-121.	3.1	42
58	Improving Disturbance Rejection Properties of the MMO Method. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 83-87.	0.4	0
59	Magnitude Optimum Tuning Using Non-Parametric Data in the Frequency Domain. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 385-390.	0.4	1
60	A new PID controller tuning method based on multiple integrations. Control Engineering Practice, 1999, 7, 623-633.	3.2	57
61	A multiple integration tuning method for filtered PID controller. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 4446-4451.	0.4	1
62	Anti-Windup Designs for Multivariable Controllers. Automatica, 1998, 34, 1559-1565.	3.0	70
63	A New Simple Auto-Tuning Method for PID Controllers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 463-468.	0.4	6
64	A Review of Anti-Windup, Bumpless and Conditioned Transfer. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1996, 29, 1524-1529.	0.4	8
65	Improving Disturbance-Rejection by Using Disturbance Estimator. , 0, , .		0