

Baris Baykant Alagoz

List of Publications by Year in descending order

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94
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95
all docs

95
docs citations

95
times ranked

1168
citing authors

#	ARTICLE	IF	CITATIONS
1	An effective analog circuit design of approximate fractional-order derivative models of M-SBL fitting method. Engineering Science and Technology, an International Journal, 2022, 33, 101069.	3.2	10
2	An efficient PID-based optimizer loop and its application in De Jong's functions minimization and quadratic regression problems. Systems and Control Letters, 2022, 159, 105090.	2.3	4
3	Behavioural modelling of delayed imbalance dynamics in nature: a parametric modelling for simulation of delayed instability dynamics. International Journal of General Systems, 2022, 51, 313-333.	2.5	1
4	Optimal F-domain stabilization technique for reduction of commensurate fractional-order SISO systems. Fractional Calculus and Applied Analysis, 2022, 25, 803-821.	2.2	4
5	An effective integrated genetic programming and neural network model for electronic nose calibration of air pollution monitoring application. Neural Computing and Applications, 2022, 34, 12633-12652.	5.6	10
6	An Evolutionary Field Theorem: Evolutionary Field Optimization in Training of Power-Weighted Multiplicative Neurons for Nitrogen Oxides-Sensitive Electronic Nose Applications. Sensors, 2022, 22, 3836.	3.8	4
7	Design of Robust PI Controllers for Interval Plants With Worst-Case Gain and Phase Margin Specifications in Presence of Multiple Crossover Frequencies. IEEE Access, 2022, 10, 67713-67726.	4.2	3
8	Towards Industrialization of FOPID Controllers: A Survey on Milestones of Fractional-Order Control and Pathways for Future Developments. IEEE Access, 2021, 9, 21016-21042.	4.2	106
9	Optimal V-Plane Robust Stabilization Method for Interval Uncertain Fractional Order PID Control Systems. Fractal and Fractional, 2021, 5, 3.	3.3	6
10	A Genetic Programming Based Pollutant Concentration Predictor Design for Urban Pollution Monitoring Based on Multi-Sensor Electronic Nose. , 2021, , .		2
11	Software Implementation of FOPID Controllers with Tuning Capability for Fractional FOPDT Plants. , 2021, , .		0
12	A Robust Frequency-Domain-Based Order Reduction Scheme for Linear Time-Invariant Systems. IEEE Access, 2021, 9, 165773-165785.	4.2	4
13	Value Set-Based Numerical Analysis of Robust Stability for Fractional-Order Retarded Quasi-Polynomials with Uncertain Parameters and Uncertain Fractional Orders. Lecture Notes in Networks and Systems, 2021, , 18-23.	0.7	0
14	A NARX Model Reference Adaptive Control Scheme: Improved Disturbance Rejection Fractional-Order PID Control of an Experimental Magnetic Levitation System. Algorithms, 2020, 13, 201.	2.1	14
15	Disturbance rejection FOPID controller design in v-domain. Journal of Advanced Research, 2020, 25, 171-180.	9.5	16
16	Fine-Tuning of Feedback Gain Control for Hover Quad Copter Rotors by Stochastic Optimization Methods. Iranian Journal of Science and Technology - Transactions of Electrical Engineering, 2020, 44, 1663-1672.	2.3	9
17	Multi-Loop Model Reference Proportional Integral Derivative Controls: Design and Performance Evaluations. Algorithms, 2020, 13, 38.	2.1	8
18	2DOF multi-objective optimal tuning of disturbance reject fractional order PIDA controllers according to improved consensus oriented random search method. Journal of Advanced Research, 2020, 25, 159-170.	9.5	11

#	ARTICLE	IF	CITATIONS
19	Revisiting four approximation methods for fractional order transfer function implementations: Stability preservation, time and frequency response matching analyses. Annual Reviews in Control, 2020, 49, 239-257.	7.9	33
20	Fractional Order Filter Discretization by Particle Swarm Optimization Method. Advances in Dynamics, Patterns, Cognition, 2019, , 133-144.	0.3	0
21	Adaptive Gradient Descent Control of Stable, First Order, Time-delay Dynamic Systems According to Time-Varying FIR Filter Model Assumption. , 2019, , .		3
22	Disturbance Rejection Fractional Order PID Controller Design in v-domain by Particle Swarm Optimization. , 2019, , .		6
23	Fractional Order Model Identification of Receptor-Ligand Complexes Formation by Equivalent Electrical Circuit Modeling. , 2019, , .		3
24	Electronically reconfigurable two-path fractional-order PI/D controller employing constant phase blocks based on bilinear segments using CMOS modified current differencing unit. Microelectronics Journal, 2019, 86, 114-129.	2.0	32
25	Probabilistic Relational Connectivity Analysis of Bigram Models. , 2019, , .		3
26	Genetik Algoritma ile D $\frac{1}{4}$ Å $\frac{1}{4}$ k Duyarl $\frac{1}{4}$ Å $\frac{1}{4}$ Ya Sahip Optimal FOPID Denetleyici Tasarl $\frac{1}{4}$ m $\frac{1}{4}$. , 2019, , .		0
27	A Theoretical Study on Event Spreading Prediction by Probabilistic Connectivity Analysis in Dispersive Networks. , 2019, , .		1
28	Time-domain identification of One Noninteger Order Plus Time Delay models from step response measurements. International Journal of Modeling, Simulation, and Scientific Computing, 2019, 10, 1941011.	1.4	24
29	A theoretical investigation on moving average filtering solution for fixed-path map matching of noisy position data. International Journal of Sensor Networks, 2019, 29, 213.	0.4	4
30	Multi-loop Model Reference Adaptive PID Control for Fault-Tolerance. Balkan Journal of Electrical and Computer Engineering, 2019, 7, 276-285.	0.6	3
31	A theoretical investigation on moving average filtering solution for fixed-path map matching of noisy position data. International Journal of Sensor Networks, 2019, 29, 213.	0.4	0
32	Model Reference Adaptive Control Scheme for Retuning Method-Based Fractional-Order PID Control with Disturbance Rejection Applied to Closed-Loop Control of a Magnetic Levitation System. Journal of Circuits, Systems and Computers, 2018, 27, 1850176.	1.5	28
33	Fractional order linear time invariant system stabilization by brute-force search. Transactions of the Institute of Measurement and Control, 2018, 40, 1447-1456.	1.7	11
34	Adaptive Control of Nonlinear TRMS Model by Using Gradient Descent Optimizers. , 2018, , .		5
35	Possible Contributions of Smart Grids to Regional Development of Countries. , 2018, , .		1
36	Stabilization of Fractional Order PID Controllers for Time-Delay Fractional Order Plants by Using Genetic Algorithm. , 2018, , .		7

#	ARTICLE	IF	CITATIONS
37	FOPID Controllers and Their Industrial Applications: A Survey of Recent Results 1 1This study is based upon works from COST Action CA15225, a network supported by COST (European Cooperation in) Tj ETQq1 1 0.74814 rgBTq/Overlock	0.74814	14
38	A Numerical Study for Plant-Independent Evaluation of Fractional-order PID Controller Performance 1 1This study is based upon works from COST Action CA15225, a network supported by COST (European) Tj ETQq0.0 0 rgBTq/Overlock	0.0	0
39	A Set-point Filter Type 2DOF Fractional Order PID Control System Design Scheme for Improved Disturbance Rejection Control. SSRN Electronic Journal, 2018, , .	0.4	1
40	Estimation of Reduced Order Equivalent Circuit Model Parameters of Batteries from Noisy Current and Voltage Measurements. Balkan Journal of Electrical and Computer Engineering, 2018, 6, 224-231.	0.6	9
41	Effects of fractional order integration on ASDM signals. International Journal of Dynamics and Control, 2017, 5, 10-17.	2.5	2
42	Implementation of fractional order filters discretized by modified Fractional Order Darwinian Particle Swarm Optimization. Measurement: Journal of the International Measurement Confederation, 2017, 107, 153-164.	5.0	30
43	A note on applications of time-domain solution of Cole permittivity models. Optik, 2017, 139, 272-282.	2.9	7
44	Hurwitz stability analysis of fractional order LTI systems according to principal characteristic equations. ISA Transactions, 2017, 70, 7-15.	5.7	26
45	Master-Slave Stochastic Optimization for Model-Free Controller Tuning. Iranian Journal of Science and Technology - Transactions of Electrical Engineering, 2017, 41, 153-163.	2.3	6
46	Disturbance Rejection FOPID Control of Rotor by Multi-Objective BB-BC Optimization Algorithm. , 2017, , .		8
47	Discretization of fractional order transfer functions by weighted multi-objective particle swarm optimization method. , 2017, , .		3
48	Multi-source energy mixing for renewable energy microgrids by particle swarm optimization. , 2017, , .		22
49	Multi-Loop model reference adaptive control of fractional-order PID control systems. , 2017, , .		6
50	A theoretical investigation on consideration of initial conditions in fractional-order transfer function modeling. , 2017, , .		0
51	Reference-shaping adaptive control by using gradient descent optimizers. PLoS ONE, 2017, 12, e0188527.	2.5	17
52	Power regulated DC/DC driver design by hierarchical control. Turkish Journal of Electrical Engineering and Computer Sciences, 2016, 24, 1325-1339.	1.4	3
53	Frequency deviation indicators for estimation of energy balance state in smart AC grids. , 2016, , .		1
54	Opportunities for energy efficiency in smart cities. , 2016, , .		26

#	ARTICLE	IF	CITATIONS
55	Detection of RR interval alterations in ECG signals by using first order fractional filter. , 2016, , .		4
56	A note on robust stability analysis of fractional order interval systems by minimum argument vertex and edge polynomials. IEEE/CAA Journal of Automatica Sinica, 2016, 3, 411-421.	13.1	20
57	Improvement of IIR filter discretization for fractional order filter by discrete stochastic optimization. , 2016, , .		6
58	Multi-source energy mixing by time rate multiple PWM for microgrids. , 2016, , .		5
59	Energy consumption analysis of motorized transportation in cities by considering average mobile mass. , 2016, , .		0
60	Utilization of energy from waste plants for microgrids. , 2016, , .		3
61	Power converters modeling in Matlab/Simulink for microgrid simulations. , 2016, , .		7
62	An integer order approximation method based on stability boundary locus for fractional order derivative/integrator operators. ISA Transactions, 2016, 62, 154-163.	5.7	50
63	Utilization of energy from waste potential in Turkey as distributed secondary renewable energy source. Renewable Energy, 2016, 90, 493-500.	8.9	31
64	Dynamic energy pricing by closed-loop fractional-order PI control system and energy balancing in smart grid energy markets. Transactions of the Institute of Measurement and Control, 2016, 38, 565-578.	1.7	32
65	Image processing based object tracking application with fractional-order model reference controller. Pamukkale University Journal of Engineering Sciences, 2016, 22, 659-665.	0.4	1
66	PID controller design based on second order model approximation by using stability boundary locus fitting. , 2015, , .		6
67	An experimental investigation for error-cube PID control. Transactions of the Institute of Measurement and Control, 2015, 37, 652-660.	1.7	6
68	Implicit disturbance rejection performance analysis of closed loop control systems according to communication channel limitations. IET Control Theory and Applications, 2015, 9, 2522-2531.	2.1	31
69	Sigmoid based PID controller implementation for rotor control. , 2015, , .		11
70	Towards energy webs: Hierarchical tree topology for future smart grids. , 2015, , .		3
71	A note on demand side load management by maximum power limited load shedding algorithm for smart grids. , 2015, , .		9
72	Probabilistic robust stabilization of fractional order systems with interval uncertainty. ISA Transactions, 2015, 57, 101-110.	5.7	17

#	ARTICLE	IF	CITATIONS
73	A smart building power management concept: Smart socket applications with DC distribution. International Journal of Electrical Power and Energy Systems, 2015, 64, 679-688.	5.5	58
74	Disturbance rejection performance analyses of closed loop control systems by reference to disturbance ratio. ISA Transactions, 2015, 55, 63-71.	5.7	45
75	Design of fractional-order PI controllers for disturbance rejection using RDR measure. , 2014, , .		12
76	Tuning of fractional order PID with master-slave stochastic multi-parameter divergence optimization method. , 2014, , .		6
77	A numerical investigation for robust stability of fractional-order uncertain systems. ISA Transactions, 2014, 53, 189-198.	5.7	60
78	A closed-loop energy price controlling method for real-time energy balancing in a smart grid energy market. Energy, 2013, 59, 95-104.	8.8	42
79	Renewable energy integration for smart sites. Energy and Buildings, 2013, 64, 456-462.	6.7	48
80	An FDTD based numerical analysis of microwave propagation properties in a skin-fat tissue layers. Optik, 2013, 124, 5218-5224.	2.9	9
81	An approach for the integration of renewable distributed generation in hybrid DC/AC microgrids. Renewable Energy, 2013, 52, 251-259.	8.9	113
82	Auto-tuning of PID controller according to fractional-order reference model approximation for DC rotor control. Mechatronics, 2013, 23, 789-797.	3.3	98
83	Sonic crystal acoustic switch device. Journal of the Acoustical Society of America, 2013, 133, EL485-EL490.	1.1	25
84	Theoretical demonstration of the hybrid focusing points of sonic crystal flat lenses and possible applications. Chinese Physics B, 2013, 22, 076201.	1.4	4
85	A user-mode distributed energy management architecture for smart grid applications. Energy, 2012, 44, 167-177.	8.8	125
86	A distance-based dynamical transition analysis of time series signals and application to biological systems. Journal of Biological Physics, 2012, 38, 293-303.	1.5	0
87	A space charge motion simulation with FDTD method and application in negative corona electrostatic field analysis. Applied Mathematics and Computation, 2012, 218, 9007-9017.	2.2	5
88	A numerical method for the analysis of polydisperse aerosol particles charging in a coaxial electrode system. Journal of Electrostatics, 2012, 70, 111-116.	1.9	4
89	An analysis of corona field charging kinetics for polydisperse aerosol particles by considering concentration and mobility. Journal Physics D: Applied Physics, 2010, 43, 365205.	2.8	5
90	Frequency-controlled wave focusing by a sonic crystal lens. Applied Acoustics, 2009, 70, 1400-1405.	3.3	30

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91	A Note on Commensurate-Order Characteristic Root Equivalency Class of Linear Time Invariant Systems. <i>Balkan Journal of Electrical and Computer Engineering</i> , 0, , 86-89.	0.6	1
92	Performance Analysis of SMDO Method with Benchmark Functions with Matlab Toolbox. <i>Journal of the Institute of Science and Technology</i> , 0, , 2451-2460.	0.9	0
93	PIDA DenetÃşilerin Bozucu DÃşlame PerformansÄ±nÄ±n Teorik Ä°ncelenmesi. <i>European Journal of Science and Technology</i> , 0, , 42-53.	0.5	0
94	An experimental analog circuit realization of Matsudaâ€™s approximate fractional-order integral operators for industrial electronics. <i>Engineering Research Express</i> , 0, , .	1.6	4