Rajani K Mudi

List of Publications by Year
in descending order

57 papers	1,148 citations	933264 10 h-index	414303 32 g-index
61 all docs	61 docs citations	61 times ranked	640 citing authors

#	Article	IF	Citations
1	Review on IMC-based PID Controller Design Approach with Experimental Validations. IETE Journal of Research, 2023, 69, 1640-1660.	1.8	14
2	Mathematical modelling and fuzzy knowledge-based decoupled control scheme for real-time interacting level control- MIMO system. International Journal of Modelling and Simulation, 2023, 43, 75-86.	2.3	2
3	Desired Characteristic Equation Based PID Controller Tuning for Lag-Dominating Processes With Real-Time Realization on Level Control System. , 2021, 5, 1255-1260.		15
4	Lyapunov approach based design of a gain adaptive interval type-2 fuzzy controller for servo systems. Journal of Intelligent and Fuzzy Systems, 2021, 40, 4187-4205.	0.8	0
5	Fuzzy rule-based set point weighting for fuzzy PID controller. SN Applied Sciences, 2021, 3, 1.	1.5	15
6	Stabilized IMC-PI controller designing for IPDT processes based on gain and phage margin criteria. IFAC-PapersOnLine, 2020, 53, 129-134.	0.5	4
7	Nature-inspired and hybrid optimization algorithms on interval Type-2 fuzzy controller for servo processes: a comparative performance study. SN Applied Sciences, 2020, 2, 1.	1.5	4
8	Fuzzy rule-based auto-tuned internal model controller for real-time experimentation on temperature and level processes. International Journal of Automation and Control, 2020, 14, 239.	0.3	6
9	Designing of IMC-PID Controller for Higher-order Process Based on Model Reduction Method and Fractional Coefficient Filter with Real-time Verification. Chemical Product and Process Modeling, 2019, 15, .	0.5	5
10	Designing of internal model control proportional, integral, and derivative controller with second‐order filtering for lag‐and delay‐dominating processes based on suitable dead time approximation. Asia-Pacific Journal of Chemical Engineering, 2019, 14, e2359.	0.8	5
11	Fuzzy tuned model based control for level and temperature processes. Microsystem Technologies, 2019, 25, 819-827.	1.2	9
12	A novel fuzzy pixel intensity correlation based segmentation algorithm for early detection of Alzheimer's disease. Multimedia Tools and Applications, 2019, 78, 12465-12489.	2.6	10
13	Real-time Evaluation of an Interval Type-2 Fuzzy PID Controller on Servo Position Control System. , 2018, , .		6
14	Robust Multiobjective Optimization With Robust Consensus. IEEE Transactions on Fuzzy Systems, 2018, 26, 3743-3754.	6.5	10
15	Fuzzy-Tuned SIMC Controller for Level Control Loop. Lecture Notes in Networks and Systems, 2018, , 239-245.	0.5	4
16	Fuzzy-Based Adaptive IMC-PI Controller for Real-Time Application on a Level Control Loop. Advances in Intelligent Systems and Computing, 2017, , 387-395.	0.5	3
17	Fuzzy-Based Auto-Tuned IMC-PID Controller for Level Control Process. Communications in Computer and Information Science, 2017, , 372-381.	0.4	3
18	Design of modified model-based adaptive control system for FOPDT processes. , 2017, , .		1

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19	Model identification of coupled-tank system â€" MIMO process. , 2017, , .		10
20	DYNAMIC SET-POINT WEIGHTING FOR FUZZY PID CONTROLLER. Control and Intelligent Systems, 2017, 45, .	0.3	0
21	Adaptive proportional derivative controller using fuzzy logic. International Journal of Convergence Computing, 2016, 2, 144.	0.2	0
22	An improved fuzzy PID controller with fuzzy rule based set-point weighting technique. , 2016, , .		1
23	Design of multi-loop IMC-PID controller for TITO process with dead time. , 2016, , .		2
24	An Improved Dynamic Set Point Weighted PI Controller for Servo Position Control Application. , 2016, , .		0
25	Particle Swarm Optimization Based Adaptive PID Controller for pH-Neutralization Process. Advances in Intelligent Systems and Computing, 2015, , 159-166.	0.5	6
26	Genetic Algorithm-Based Adaptive PID Controller. Advances in Intelligent Systems and Computing, 2015, , 57-64.	0.5	3
27	Fuzzy Rule-Based Adaptive Proportional Derivative Controller. Advances in Intelligent Systems and Computing, 2015, , 193-200.	0.5	1
28	IMC-PID controller for pure integrating process with large dead time. , 2014, , .		3
29	Self-tuning fuzzy PID controller for non-linear and higher-order processes. , 2014, , .		0
30	An online dynamic set point weighting scheme for PID controller. , 2014, , .		4
31	Self-tuning fuzzy PID controller for integrating processes. , 2014, , .		2
32	Self-tuning fuzzy PI controller for integrating and non-linear processes. , 2014, , .		3
33	Design of Fuzzy-IMC PID Controller for TITO Process with Time Delay. , 2014, , .		2
34	Fuzzy logic based high performance PID controller. , 2014, , .		0
35	A simple nonlinear PD controller for integrating processes. ISA Transactions, 2014, 53, 162-172.	3.1	25
36	Fuzzy Self-tuning of Conventional PID Controller for High-Order Processes. Advances in Intelligent Systems and Computing, 2014, , 41-48.	0.5	2

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37	Fuzzy PI Controller with Dynamic Set Point Weighting. Advances in Intelligent Systems and Computing, 2013, , 51-58.	0.5	5
38	Dynamic Set-Point Weighted Fuzzy PID Controller. , 2013, , .		8
39	Design of Fuzzy Based IMC-PID Controller for IPD Process. , 2013, , .		8
40	PI Controller with Fuzzy Logic Based On-Line Variable Reset-Rate. , 2013, , .		0
41	An adaptive PD type FLC with its real-time implementation on a servo position control system. , 2013, , .		3
42	PREDICTION OF PROTEIN SECONDARY STRUCTURE USING PROBABILITY BASED FEATURES AND A HYBRID SYSTEM. Journal of Bioinformatics and Computational Biology, 2013, 11, 1350012.	0.3	5
43	An Augmented Self-tuning Fuzzy Logic Controller with Its Real-Time Implementation. Advances in Intelligent Systems and Computing, 2013, , 67-75.	0.5	0
44	A non-linear PD controller for pure integrating process with delay. , 2012, , .		1
45	A self-tuning fuzzy PID controller with real-time implementation on a position control system. , 2012, , .		13
46	A new self-tuning fuzzy proportional-derivative controller for high-order systems. , 2012, , .		1
47	An auto-tuning PD controller for DC servo position control system. , 2012, , .		12
48	A robust self-tuning fuzzy controller for integrating systems. , 2012, , .		2
49	An adaptive fuzzy controller for overhead crane. , 2012, , .		8
50	Performance improvement of PI controllers through dynamic set-point weighting. ISA Transactions, 2011, 50, 220-230.	3.1	52
51	An improved auto-tuning scheme for PID controllers. ISA Transactions, 2009, 48, 396-409.	3.1	96
52	An improved auto-tuning scheme for PI controllers. ISA Transactions, 2008, 47, 45-52.	3.1	87
53	Computational intelligence for decision-making systems. International Journal of Intelligent Systems, 2003, 18, 483-486.	3.3	3
54	A note on fuzzy PI-type controllers with resetting action. Fuzzy Sets and Systems, 2001, 121, 149-159.	1.6	21

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55	A self-tuning fuzzy PI controller. Fuzzy Sets and Systems, 2000, 115, 327-338.	1.6	157
56	A robust self-tuning scheme for PI- and PD-type fuzzy controllers. IEEE Transactions on Fuzzy Systems, 1999, 7, 2-16.	6.5	454
57	A Self-Tuning Fuzzy PD Controller. IETE Journal of Research, 1998, 44, 177-189.	1.8	22