

# Dr KPS Rana

## List of Publications by Year in descending order

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Version: 2024-02-01

83  
papers

1,805  
citations

279798

23  
h-index

289244

40  
g-index

84  
all docs

84  
docs citations

84  
times ranked

1355  
citing authors

#	ARTICLE	IF	CITATIONS
1	Control loop oscillation detection and quantification using PRONY method of IIR filter design and deep neural network. Journal of Intelligent and Fuzzy Systems, 2022, 42, 1141-1154.	1.4	3
2	An adaptive robust fuzzy PI controller for maximum power point tracking of photovoltaic system. Optik, 2022, 259, 168942.	2.9	13
3	A topic modeled unsupervised approach to single document extractive text summarization. Knowledge-Based Systems, 2022, 246, 108636.	7.1	25
4	Robust trajectory tracking control of non-holonomic wheeled mobile robots using an adaptive fractional order parallel fuzzy PID controller. Journal of the Franklin Institute, 2022, 359, 4160-4215.	3.4	20
5	A Chaos-Infused Moth-Flame Optimizer. Arabian Journal for Science and Engineering, 2022, 47, 10769-10809.	3.0	3
6	Backstepping controller for nonlinear active suspension system. , 2021, , 347-374.		6
7	Performance Analysis of an Improved Variable Step-Size IC MPPT Technique for SPV System. , 2021, , .		4
8	Performance Enhancement of a MEMS Capacitive Accelerometer Using Fuzzy Logic Controller. Journal of the Institution of Engineers (India): Series B, 2021, 102, 295-310.	1.9	1
9	Enhanced Marine Predators Algorithm for identifying static and dynamic Photovoltaic models parameters. Energy Conversion and Management, 2021, 236, 113971.	9.2	42
10	A novel complex-valued convolutional neural network for medical image denoising. Biomedical Signal Processing and Control, 2021, 69, 102859.	5.7	32
11	A multimodal hierarchical approach to speech emotion recognition from audio and text. Knowledge-Based Systems, 2021, 229, 107316.	7.1	40
12	Efficient maximum power point tracking in fuel cell using the fractional-order PID controller. , 2021, , 111-132.		8
13	Detailed Performance Analysis of SPV Array Configurations under Partial Shading Conditions. , 2021, , .		1
14	Fractional-order self-tuned fuzzy PID controller for three-link robotic manipulator system. Neural Computing and Applications, 2020, 32, 7235-7257.	5.6	29
15	A novel life choice-based optimizer. Soft Computing, 2020, 24, 9121-9141.	3.6	33
16	Thermistor Linearization on FPGA Using Hoge Equations. , 2020, , .		0
17	A nonlinear framework for stiction compensation in ratio control loop. ISA Transactions, 2020, 103, 319-342.	5.7	3
18	Optimal integral minus proportional derivative controller design by evolutionary algorithm for thermal-renewable energy-hybrid power systems. IET Renewable Power Generation, 2019, 13, 2000-2012.	3.1	34

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19	Efficient control of a 3-link planar rigid manipulator using self-regulated fractional-order fuzzy PID controller. Applied Soft Computing Journal, 2019, 82, 105531.	7.2	12
20	Parameter extraction of fuel cells using hybrid interior search algorithm. International Journal of Energy Research, 2019, 43, 2854-2880.	4.5	26
21	A Novel $\frac{d^2x}{dt^2} + 2\frac{dx}{dt} + x = P$ based control scheme using GWO tuned PID controller for efficient MPPT of PEM fuel cell. ISA Transactions, 2019, 93, 312-324.	9.7	16
22	A novel approach to parameter estimation of photovoltaic systems using hybridized optimizer. Energy Conversion and Management, 2019, 187, 486-511.	9.2	92
23	Time-Varying Pole-Radius IIR Multi-Notch Filters with Improved Performance. Arabian Journal for Science and Engineering, 2019, 44, 7101-7120.	3.0	6
24	Comment on "Important notes on parameter estimation of solar photovoltaic cell", by Gnetchejo et al. [Energy Conversion and Management, <a href="https://doi.org/10.1016/j.enconman.2019.111870">https://doi.org/10.1016/j.enconman.2019.111870</a> ]. Energy Conversion and Management, 2019, 201, 112131.	9.2	1
25	Reply on "Reply to comment on Important notes on parameter estimation of solar photovoltaic cell", by Gnetchejo et al. [Energy Conversion and Management, <a href="https://doi.org/10.1016/j.enconman.2019.111870">https://doi.org/10.1016/j.enconman.2019.111870</a> ]. Energy Conversion and Management, 2019, 201, 112234.	9.2	1
26	A Forward Converter with Load Side Demagnetization Scheme. , 2019, , .		0
27	Comments on "Development of an Intelligent Temperature Transducer". IEEE Sensors Journal, 2019, 19, 4734-4736.	4.7	2
28	Efficient control of integrated power system using self-tuned fractional-order fuzzy PID controller. Neural Computing and Applications, 2019, 31, 4137-4155.	5.6	30
29	Enhancing Linearity of Voltage Controlled Oscillator Thermistor Signal Conditioning Circuit Using Linear Search. Journal of the Institution of Engineers (India): Series B, 2018, 99, 263-271.	1.9	0
30	FPGA Implementation of Steinhart-Hart Equation for Accurate Thermistor Linearization. IEEE Sensors Journal, 2018, 18, 2260-2267.	4.7	18
31	Self-tuned robust fractional order fuzzy PD controller for uncertain and nonlinear active suspension system. Neural Computing and Applications, 2018, 30, 1827-1843.	5.6	45
32	Control of a Three-Link Manipulator Using Fractional-Order PID Controller. , 2018, , 477-510.		7
33	A BSA Tuned Fractional-Order PID Controller for Enhanced MPPT in a Photovoltaic System. , 2018, , 673-703.		1
34	A nonlinear PID controller based novel maximum power point tracker for PV systems. Journal of the Franklin Institute, 2018, 355, 7827-7864.	3.4	35
35	Parameter estimation of solar cells diode models by an improved opposition-based whale optimization algorithm. Energy Conversion and Management, 2018, 171, 1843-1859.	9.2	215
36	A fractional order fuzzy PD+I controller for three-link electrically driven rigid robotic manipulator system. Journal of Intelligent and Fuzzy Systems, 2018, 35, 5287-5299.	1.4	14

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37	A robust fractional order fuzzy P + fuzzy I + fuzzy D controller for nonlinear and uncertain system. International Journal of Automation and Computing, 2017, 14, 474-488.	4.5	28
38	A pole-radius-varying IIR notch filter with enhanced post-transient performance. Biomedical Signal Processing and Control, 2017, 33, 379-391.	5.7	16
39	Comments on "Development of an ANN-Based Linearization Technique for the VCO Thermistor Circuit". IEEE Sensors Journal, 2017, 17, 1187-1189.	4.7	4
40	PV cell and module efficient parameters estimation using Evaporation Rate based Water Cycle Algorithm. Swarm and Evolutionary Computation, 2017, 35, 93-110.	8.1	135
41	Comments on "Design and modeling of an intelligent temperature to frequency converter". Measurement: Journal of the International Measurement Confederation, 2017, 102, 138-141.	5.0	2
42	An educational laboratory virtual instrumentation suite assisted experiment for studying fundamentals of series resistance-inductance-capacitance circuit. European Journal of Engineering Education, 2017, 42, 1220-1239.	2.3	7
43	Study of optimization methods for tuning of PID gains for three link manipulator. , 2017, , .		5
44	Comments on "Design of two-layered fractional order fuzzy logic controllers applied to robotic manipulator with variable payload". Applied Soft Computing Journal, 2017, 51, 145-146.	7.2	0
45	FPGA Resource Requirements for Thermistor Linearization: A Comparative Study. Experimental Techniques, 2017, 41, 153-169.	1.5	3
46	Nonlinear adaptive fractional order fuzzy PID control of a 2-link planar rigid manipulator with payload. Journal of the Franklin Institute, 2017, 354, 993-1022.	3.4	62
47	Efficient Modeling of Linear Discrete Filters Using Ant Lion Optimizer. Circuits, Systems, and Signal Processing, 2017, 36, 1535-1568.	2.0	22
48	An efficient 2nd order HR digital differentiator design using cuckoo search algorithm. , 2017, , .		0
49	Pneumatic control valve stiction modeling using artificial neural network. , 2017, , .		5
50	A comparative study for flow control using SCIC and NPIC controllers. , 2017, , .		1
51	Non-cascading structure based Flyback-Forward converter with large duty ratio. , 2016, , .		2
52	Enhancing linearity in thermistor signal conditioning circuit using linear numerical search. , 2016, , .		3
53	Efficient 2 <sup>nd</sup> order full band digital IIR integrator design using Cuckoo search algorithm. , 2016, , .		0
54	Efficient FIR filter designs using constrained genetic algorithms based optimization. , 2016, , .		6

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55	A teacher learning based optimization approach to tune backstepping controller for a single-link flexible-joint manipulator. , 2016, , .		2
56	Efficient reaching law for SMC with PID surface applied to a manipulator. , 2016, , .		2
57	Implementation of fractional order integrator/differentiator on field programmable gate array. AEJ - Alexandria Engineering Journal, 2016, 55, 1765-1773.	6.4	49
58	Development of Ant Lion Optimizer toolkit in LabVIEWâ„¢. , 2016, , .		5
59	Cuckoo search implementation in LabVIEW. , 2016, , .		4
60	Some investigations on hybrid fuzzy IPD controllers for proportional and derivative kick suppression. International Journal of Automation and Computing, 2016, 13, 516-528.	4.5	10
61	Intelligent Ratio Control in Presence of Pneumatic Control Valve Stiction. Arabian Journal for Science and Engineering, 2016, 41, 677-689.	1.1	5
62	Robust speed control of hybrid electric vehicle using fractional order fuzzy PD and PI controllers in cascade control loop. Journal of the Franklin Institute, 2016, 353, 1713-1741.	3.4	75
63	Efficient Design of Discrete Fractional-Order Differentiators Using Nelderâ€œMead Simplex Algorithm. Circuits, Systems, and Signal Processing, 2016, 35, 2155-2188.	2.0	30
64	Velocity and position forms of self-tuning Fuzzy PI controller applied to jacketed CSTR. , 2015, , .		0
65	Comparative study of BLF and QLF based backstepping controllers for active suspension system. , 2015, , .		3
66	Optimization of PID controller with first order noise filter. , 2015, , .		6
67	Comparative study of some optimization techniques applied to Jacketed CSTR control. , 2015, , .		11
68	Efficient air pollutants prediction using ANFIS trained by Modified PSO algorithm. , 2015, , .		2
69	Efficient IIR notch filter design using Minimax optimization for 50Hz noise suppression in ECG. , 2015, , .		24
70	FPGA implementation of interpolation techniques for thermistor linearization. , 2015, , .		2
71	An online tuned novel nonlinear PI controller for stiction compensation in pneumatic control valves. ISA Transactions, 2015, 58, 434-445.	5.7	29
72	A fractional order fuzzy PID controller for binary distillation column control. Expert Systems With Applications, 2015, 42, 8533-8549.	7.6	85

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73	A Virtual Instrumentation Approach to Neural Network-Based Thermistor Linearization on Field Programmable Gate Array. <i>Experimental Techniques</i> , 2015, 39, 23-30.	1.5	12
74	Online tuning of fractional order PI controller using particle swarm optimization. , 2015, , .		1
75	Development of Bat Algorithm toolkit in LabVIEW&lt;sup>&gt;&#x2122;&lt;/sup>&lt;/sup>. , 2015, , .		2
76	Development of a Grey Wolf Optimizer Toolkit in LabVIEW<sup>&gt;&#x2122;</sup>. , 2015, , .		5
77	Online PI controller tuning for a nonlinear plant using genetic algorithm. , 2014, , .		5
78	Comparative study of some optimization techniques applied to DC motor control. , 2014, , .		21
79	Performance analysis of fractional order fuzzy PID controllers applied to a robotic manipulator. <i>Expert Systems With Applications</i> , 2014, 41, 4274-4289.	7.6	199
80	Fuzzy control of an electrodynamic shaker for automotive and aerospace vibration testing. <i>Expert Systems With Applications</i> , 2011, 38, 11335-11346.	7.6	43
81	A Novel Technique for Acquisition and Presentation of Complex Vibration Waveforms. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2010, 59, 1652-1662.	4.7	5
82	Correlation based novel technique for real time oscilloscope triggering for complex waveforms. <i>Measurement: Journal of the International Measurement Confederation</i> , 2010, 43, 299-311.	5.0	16
83	A fatigue crack growth life prediction model for metal matrix nanocomposites: contribution of strengthening factors. <i>Advanced Composite Materials</i> , 0, , 1-19.	1.9	0