

# Umar Farooq

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7577481/publications.pdf>

Version: 2024-02-01

90  
papers

613  
citations

933264

10  
h-index

752573

20  
g-index

91  
all docs

91  
docs citations

91  
times ranked

567  
citing authors

#	ARTICLE	IF	CITATIONS
1	Solution of an Economic Dispatch Problem Through Particle Swarm Optimization: A Detailed Survey - Part I. IEEE Access, 2017, 5, 15105-15141.	2.6	94
2	Solution of an Economic Dispatch Problem Through Particle Swarm Optimization: A Detailed Survey â€œ Part II. IEEE Access, 2017, 5, 24426-24445.	2.6	56
3	Recent Approaches of Forecasting and Optimal Economic Dispatch to Overcome Intermittency of Wind and Photovoltaic (PV) Systems: A Review. Energies, 2019, 12, 4392.	1.6	39
4	Automatic license plate recognition using extracted features. , 2016, , .		31
5	Fuzzy Model Based Bilateral Control Design of Nonlinear Tele-Operation System Using Method of State Convergence. IEEE Access, 2016, 4, 4119-4135.	2.6	31
6	Neo-Fuzzy Integrated Adaptive Decayed Brain Emotional Learning Network for Online Time Series Prediction. IEEE Access, 2017, 5, 1037-1049.	2.6	24
7	Optimal Power Flow and Unified Control Strategy for Multi-Terminal HVDC Systems. IEEE Access, 2019, 7, 92642-92650.	2.6	16
8	GPS-GSM Integration for Enhancing Public Transportation Management Services. , 2010, , .		15
9	A Single-Phase Buck and Boost AC-to-AC Converter with Bipolar Voltage Gain: Analysis, Design, and Implementation. Energies, 2019, 12, 1376.	1.6	14
10	A New Single-Phase AC Voltage Converter With Voltage Buck Characteristics for Grid Voltage Compensation. IEEE Access, 2020, 8, 48886-48903.	2.6	14
11	Set-point tracking of a dc-dc boost converter through optimized PID controllers. , 2016, , .		13
12	Design and Development of an Image Processing Based Adaptive Traffic Control System with GSM Interface. , 2009, , .		12
13	Optimized Digital Controllers for Switching-Mode DC-DC Step-Down Converter. Electronics (Switzerland), 2018, 7, 412.	1.8	11
14	Multivariable Unconstrained Pattern Search Method for Optimizing Digital PID Controllers Applied to Isolated Forward Converter. Energies, 2021, 14, 77.	1.6	11
15	An Extended State Convergence Architecture for Multilateral Teleoperation Systems. IEEE Access, 2017, 5, 2063-2079.	2.6	10
16	Vehicle Detection and Shape Recognition Using Optical Sensors: A Review. , 2010, , .		9
17	Design and low cost implementation of a fuzzy logic controller for wall following behavior of a mobile robot. , 2010, , .		9
18	Comparative analysis of zero order Sugeno and Mamdani fuzzy logic controllers for obstacle avoidance behavior in mobile robot navigation. , 2011, , .		9

#	ARTICLE	IF	CITATIONS
19	Neo-Fuzzy Supported Brain Emotional Learning Based Pattern Recognizer for Classification Problems. IEEE Access, 2017, 5, 6951-6968.	2.6	9
20	A New Single-Phase Direct Frequency Controller Having Reduced Switching Count without Zero-Crossing Detector for Induction Heating System. Electronics (Switzerland), 2020, 9, 430.	1.8	9
21	An Impedance Network-Based Three Level Quasi Neutral Point Clamped Inverter with High Voltage Gain. Energies, 2020, 13, 1261.	1.6	8
22	A low cost microcontroller implementation of neural network based hurdle avoidance controller for a car-like robot. , 2010, , .		7
23	Design and implementation of fuzzy logic based autonomous car for navigation in unknown environments. , 2013, , .		7
24	On the interval type-2 fuzzy logic control of ball and plate system. , 2013, , .		7
25	A composite state convergence scheme for bilateral teleoperation systems. IEEE/CAA Journal of Automatica Sinica, 2019, 6, 1166-1178.	8.5	7
26	A Low Cost Artificial Vision System for Visually Impaired People. , 2009, , .		6
27	Design and FPGA implementation of 1-degree-of-freedom discrete PID controller for power switching converter. , 2012, , .		6
28	An interval type-2 fuzzy LQR positioning controller for wheeled mobile robot. , 2013, , .		6
29	A Simple Two-Stage AC-AC Circuit Topology Employed as High-Frequency Controller for Domestic Induction Heating System. Applied Sciences (Switzerland), 2021, 11, 8325.	1.3	6
30	A low cost microcontroller implementation of fuzzy logic based hurdle avoidance controller for a mobile robot. , 2010, , .		5
31	Half cycle pairs method for harmonic analysis of cycloconverter voltage waveform. , 2013, , .		5
32	Derivative-Free Direct Search Optimization Method for Enhancing Performance of Analytical Design Approach-Based Digital Controller for Switching Regulator. Energies, 2019, 12, 2183.	1.6	5
33	Artificial Intelligence-Based Controller for DC-DC Flyback Converter. Applied Sciences (Switzerland), 2019, 9, 5108.	1.3	5
34	Fuzzy logic based robust pole-placement controller for DC-DC buck converter. , 2011, , .		4
35	Application of neural network based model predictive controller to power switching converters. , 2011, , .		4
36	Fuzzy logic based wall tracking controller for mobile robot navigation. , 2012, , .		4

#	ARTICLE	IF	CITATIONS
37	Design and experimental evaluation of a state feedback controller for two wheeled balancing robot. , 2014, , .		4
38	Observer based fuzzy LMI regulator for stabilization and tracking control of an aeropendulum. , 2015, , .		4
39	Controller design for low-input voltage switching converters having non-minimum phase characteristics. , 2015, , .		4
40	Design of Three Phase Solid State Transformer Deployed within Multi-Stage Power Switching Converters. Applied Sciences (Switzerland), 2019, 9, 3545.	1.3	4
41	Constrained Model-Based Predictive Controller for a High-Frequency Low-Power DC-DC Buck Converter. International Journal on Electrical Engineering and Informatics, 2013, 5, 316-339.	0.3	4
42	Investigation of the Power Quality Concerns of Input Current in Single-Phase Frequency Step-Down Converter. Applied Sciences (Switzerland), 2022, 12, 3663.	1.3	4
43	An Integrated Library Management System for Book Search and Placement Tasks. , 2010, , .		3
44	Cost effective wireless attendance and access control system. , 2010, , .		3
45	An integrated approach towards designing an embedded wireless monitoring and access control system using RFID and MMS technologies. , 2013, , .		3
46	A 2D simulator for vision based autonomous road following. , 2013, , .		3
47	Experimental study of optimal Takagi Sugeno fuzzy controller for rotary inverted pendulum. , 2015, , .		3
48	Transparent fuzzy bilateral control of a nonlinear teleoperation system through state convergence. , 2016, , .		3
49	A Time-Delayed Multi-Master-Single-Slave Non-Linear Tele-Robotic System Through State Convergence. IEEE Access, 2018, 6, 5447-5459.	2.6	3
50	Ball-Scorer: Design and fabrication of an autonomous ball scoring robot. , 2010, , .		2
51	Corridor navigation with fuzzy logic control for sonar based mobile robots. , 2012, , .		2
52	An interval type-2 Fuzzy PD controller for ball and beam system. , 2013, , .		2
53	Graphical user interface based controller design for switching converters. , 2014, , .		2
54	Optimization of discrete-time controller applied to DC-DC step-down converter. , 2015, , .		2

#	ARTICLE	IF	CITATIONS
55	State convergence based bilateral control of nonlinear teleoperation system represented by TS fuzzy models. , 2016, , .		2
56	Fuzzy logic based parameter adjustment model for adaptive decayed brain emotional learning network with application to online time series prediction. , 2017, , .		2
57	State Convergence Based Design of a Single-Master-Multi-Slave Nonlinear Teleoperation System. , 2018, , .		2
58	Comparative Analysis of Analog Controllers for DC-DC Buck Converter. Journal of Automation and Control Engineering, 2015, 3, 447-451.	0.3	2
59	A New Dual Polarity Direct AC-AC Voltage Regulator Ensuring Voltage Step-Up and Step-Down Capabilities. Applied Sciences (Switzerland), 2021, 11, 11944.	1.3	2
60	Image processing based fault classification in power systems with classical and intelligent techniques. Journal of Intelligent and Fuzzy Systems, 2022, 43, 1921-1932.	0.8	2
61	An Overview of the Factors Responsible for GPS Signal Error: Origin and Solution. , 2009, , .		1
62	Design and development of an image processing based automatic library storage system. , 2010, , .		1
63	Comparative analysis of fuzzy logic and neural network based controllers for line tracking task in mobile robots. , 2010, , .		1
64	Comparative analysis of fuzzy logic controllers for corridor following behaviour of mobile robot. , 2011, , .		1
65	Design and comparison of type-1 and interval type-2 fuzzy gain scheduling controllers for ball and beam system. , 2013, , .		1
66	A neural network controller for Cartesian Plotter. , 2013, , .		1
67	Design and comparison of Takagi-Sugeno type-1 and interval type-2 fuzzy logic controllers for posture stabilization of wheeled mobile robot. , 2013, , .		1
68	An improved PID controller for switching converters. , 2014, , .		1
69	Application of a robust fuzzy logic controller with smaller rule base to a DC-DC buck converter. , 2014, , .		1
70	Robust Takagi-Sugeno Fuzzy Speed Regulator for DC Series Motors. , 2014, , .		1
71	An interval type-2 fuzzy regulator for magnetic levitation system. , 2015, , .		1
72	Elimination of limit cycle in unexcited Van der Pol system using fuzzy supported state space controllers. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
73	Fuzzy bilateral control of time delayed nonlinear tele-robotic system in unknown environments through state convergence. , 2016, , .		1
74	Compensation of the nonlinearities present in the digital control loop. , 2016, , .		1
75	Problems in constructing a discrete-time controller using frequency response plots in w-plane. , 2017, , .		1
76	A Bipolar Voltage Gain Boost AC-AC Converter Based on Four Switching Transistors. Applied Sciences (Switzerland), 2021, 11, 10254.	1.3	1
77	Bilateral Teleoperation Control of a Bipedal Robot Gait Using a Manipulator. IFAC-PapersOnLine, 2022, 55, 765-770.	0.5	1
78	Cognitive Radio: A Breakthrough, Revolution in Wireless Communication. , 2009, , .		0
79	Microcontroller Based Low Cost Controlled Rectifiers Training Module for Power Electronics Laboratory. , 2010, , .		0
80	Design and development of microcontroller based autonomous peg placement robot. , 2010, , .		0
81	Effective Techniques to Reduce Cross Border Intereference in Cellular Networks. , 2010, , .		0
82	A weighted matrix algorithm for vision based lane following in autonomous navigation. , 2013, , .		0
83	Fuzzy LMI servo controller for uncertain ball and beam system. , 2014, , .		0
84	Fuzzy logic based control of vibration energy harvesting device for automotive suspension system. , 2014, , .		0
85	Design and implementation of a robotic car to recognize traffic signs. , 2015, , .		0
86	Fuzzy state convergence based bilateral control of a tele-robotic system in unknown environments. , 2016, , .		0
87	An enhanced state convergence architecture incorporating disturbance observer for bilateral teleoperation systems. International Journal of Advanced Robotic Systems, 2019, 16, 172988141988005.	1.3	0
88	Online identification of nonlinear systems using neo-fuzzy supported brain emotional learning network. Journal of Intelligent and Fuzzy Systems, 2020, 38, 6045-6051.	0.8	0
89	Design and comparison of observer based pole placement and LQR controllers for DC motor position control. WIT Transactions on Information and Communication Technologies, 2014, , .	0.0	0
90	Teleoperation of Multi-Degrees-of-Freedom Manipulator through Composite State Convergence Scheme. IFAC-PapersOnLine, 2022, 55, 126-130.	0.5	0