

# Ibrahim Mustafa Mehedi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1472806/publications.pdf>

Version: 2024-02-01

89  
papers

929  
citations

516215

16  
h-index

525886

27  
g-index

89  
all docs

89  
docs citations

89  
times ranked

649  
citing authors

#	ARTICLE	IF	CITATIONS
1	High performance dual core D-shape PCF-SPR sensor modeling employing gold coat. Results in Physics, 2019, 15, 102788.	2.0	102
2	Design and Numerical Analysis of a Graphene-Coated SPR Biosensor for Rapid Detection of the Novel Coronavirus. Sensors, 2021, 21, 3491.	2.1	82
3	Smith Predictor Based Fractional Order Filter PID Controllers Design for Long Time Delay Systems. Asian Journal of Control, 2017, 19, 587-598.	1.9	52
4	High performance refractive index SPR sensor modeling employing graphene tri sheets. Results in Physics, 2019, 15, 102719.	2.0	47
5	Two degrees of freedom fractional controller design: Application to the ball and beam system. Measurement: Journal of the International Measurement Confederation, 2019, 135, 13-22.	2.5	47
6	Numerical Study of Circularly Slotted Highly Sensitive Plasmonic Biosensor: A Novel Approach. Results in Physics, 2020, 17, 103130.	2.0	41
7	Modeling of highly improved SPR sensor for formalin detection. Results in Physics, 2020, 16, 102874.	2.0	40
8	State feedback with fractional integral control design based on the Bode's ideal transfer function. International Journal of Systems Science, 2016, 47, 149-161.	3.7	39
9	Rotary flexible joint control by fractional order controllers. International Journal of Control, Automation and Systems, 2017, 15, 2561-2569.	1.6	32
10	Numerical analysis of gold coating based quasi D-shape dual core PCF SPR sensor. Optical and Quantum Electronics, 2020, 52, 1.	1.5	23
11	Robustness Improvement of the Fractional-Order LADRC Scheme for Integer High-Order System. IEEE Transactions on Industrial Electronics, 2021, 68, 8572-8581.	5.2	21
12	Critical evaluation and review of partial shading mitigation methods for grid-connected PV system using hardware solutions: The module-level and array-level approaches. Renewable and Sustainable Energy Reviews, 2021, 146, 111138.	8.2	21
13	Tunable Photocatalytic Properties of Planar GaN/GeC Hetero-Bilayer: Production of H <sub>2</sub> , Fuel. IEEE Access, 2020, 8, 209030-209042.	2.6	19
14	Fractional-order controller design for a heat flow process. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2016, 230, 680-691.	0.7	17
15	Stabilization of a double inverted rotary pendulum through fractional order integral control scheme. International Journal of Advanced Robotic Systems, 2019, 16, 172988141984674.	1.3	17
16	Artificial Intelligence and Medical Internet of Things Framework for Diagnosis of Coronavirus Suspected Cases. Journal of Healthcare Engineering, 2021, 2021, 1-7.	1.1	16
17	State feedback based fractional order control scheme for linear servo cart system. Journal of Vibroengineering, 2018, 20, 782-792.	0.5	14
18	An Elitist Multi-Objective Particle Swarm Optimization Algorithm for Sustainable Dynamic Economic Emission Dispatch Integrating Wind Farms. Sustainability, 2020, 12, 7253.	1.6	14

#	ARTICLE	IF	CITATIONS
19	Three degrees of freedom rotary double inverted pendulum stabilization by using robust generalized dynamic inversion control: Design and experiments. JVC/Journal of Vibration and Control, 2020, 26, 2174-2184.	1.5	13
20	Underactuated rotary inverted pendulum control using robust generalized dynamic inversion. JVC/Journal of Vibration and Control, 2020, 26, 2210-2220.	1.5	13
21	Optimal feature selection using modified cuckoo search for classification of power quality disturbances. Applied Soft Computing Journal, 2021, 113, 107897.	4.1	12
22	A Novel Deep Learning-Based State-of-Charge Estimation for Renewable Energy Management System in Hybrid Electric Vehicles. Mathematics, 2022, 10, 260.	1.1	12
23	Simulation Analysis and Experimental Evaluation of Improved Field-Oriented Controlled Induction Motors Incorporating Intelligent Controllers. IEEE Access, 2022, 10, 18380-18394.	2.6	11
24	Optimum orientation and tilt angle for estimating performance of photovoltaic modules in western region of Saudi Arabia. Journal of Renewable and Sustainable Energy, 2017, 9, 023702.	0.8	10
25	Intelligent Machine Learning With Evolutionary Algorithm Based Short Term Load Forecasting in Power Systems. IEEE Access, 2021, 9, 100113-100124.	2.6	10
26	Impact of Channel Thickness on the Performance of GaAs and GaSb DG-JLMOSEFETs: An Atomistic Tight Binding Based Evaluation. IEEE Access, 2021, 9, 117649-117659.	2.6	10
27	Potential Visible-Light Driven PtO <sub>2</sub> /Ga <sub>2</sub> O <sub>3</sub> vdW Hetero-Bilayer Photocatalysts for Water Splitting Using First-Principles. IEEE Access, 2021, 9, 109510-109521.	2.6	10
28	Positional control of rotary servo cart system using generalized dynamic inversion. Journal of Vibroengineering, 2018, 20, 2403-2413.	0.5	10
29	Numerical approach to design the graphene-based multilayered surface plasmon resonance biosensor for the rapid detection of the novel coronavirus. , 2022, 1, 494.		10
30	GaN-based double-gate (DG) sub-10-nm MOSFETs: effects of gate work function. Journal of Computational Electronics, 2018, 17, 663-669.	1.3	9
31	Fuzzy PID Control for Respiratory Systems. Journal of Healthcare Engineering, 2021, 2021, 1-6.	1.1	9
32	W-shaped slot-loaded U-shaped low SAR patch antenna for microwave-based malignant tissue detection system. Chinese Journal of Physics, 2022, 77, 233-249.	2.0	9
33	Analyzing the Off-Grid Performance of the Hybrid Photovoltaic/Diesel Energy System for a Peripheral Village. International Journal of Photoenergy, 2020, 2020, 1-15.	1.4	8
34	A New Chaotic Artificial Bee Colony for the Risk-Constrained Economic Emission Dispatch Problem Incorporating Wind Power. Energies, 2021, 14, 4014.	1.6	8
35	Nano-structural variation of highly aligned anodic Titania nanotube arrays for gas phase photocatalytic application. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 335, 200-210.	2.0	7
36	Architecture for Combined Energy and Attitude Control System. American Journal of Applied Sciences, 2005, 2, 430-435.	0.1	7

#	ARTICLE	IF	CITATIONS
37	Tandem organic solar cells with improved efficiency. , 2017, , .		6
38	Adaptive Fuzzy Sliding Mode Control of a Pressure-Controlled Artificial Ventilator. Journal of Healthcare Engineering, 2021, 2021, 1-10.	1.1	6
39	Voice Controlled Artificial Intelligent Smart Wheelchair. , 2021, , .		6
40	Hybrid Chaotic Maps-Based Artificial Bee Colony for Solving Wind Energy-Integrated Power Dispatch Problem. Energies, 2022, 15, 4578.	1.6	6
41	Continuous Power Flow Analysis for Micro-Generation Integration at Low Voltage Grid. , 2019, , .		5
42	Analytical investigation of activation energy for Mg-doped p-AlGa <sub>N</sub> . Optical and Quantum Electronics, 2020, 52, 1.	1.5	5
43	Temperature induced anomalous exciton localization in InGa <sub>N</sub> /Ga <sub>N</sub> and Ga <sub>N</sub> /AlIn <sub>N</sub> quantum wells. Journal of Computational Electronics, 2018, 17, 373-381.	1.3	4
44	Design and Performance Analysis of Tandem Organic Solar Cells: Effect of Cell Parameter. IEEE Access, 2021, 9, 40665-40680.	2.6	4
45	Artificial Intelligence-Based Digital Image Steganalysis. Security and Communication Networks, 2021, 2021, 1-9.	1.0	4
46	Fractional Order Linear ADRC-Based Controller Design for Heat-Flow Experiment. Mathematical Problems in Engineering, 2021, 2021, 1-8.	0.6	4
47	Reducing Fault Current by Using FACTS Devices to Improve Electrical Power Flow. Mathematical Problems in Engineering, 2021, 2021, 1-9.	0.6	4
48	Full state-feedback solution for a flywheel based satellite energy and attitude control scheme. Journal of Vibroengineering, 2017, 19, 3522-3532.	0.5	4
49	Plasmonic sensor based on microstructure PCF: performance analysis with outside detecting approach. Optical and Quantum Electronics, 2022, 54, 1.	1.5	4
50	Intelligent Tomographic Microwave Imaging for Breast Tumor Localization. Mathematical Problems in Engineering, 2022, 2022, 1-9.	0.6	4
51	Numerical Investigation into Optoelectronic Performance of InGa <sub>N</sub> Blue Laser in Polar, Non-Polar and Semipolar Crystal Orientation. Crystals, 2020, 10, 1033.	1.0	3
52	Experimental Application of Robust and Converse Dynamic Control for Rotary Flexible Joint Manipulator System. Mathematical Problems in Engineering, 2021, 2021, 1-9.	0.6	3
53	Coplanar waveguide-fed compact planar ultra-wideband antenna with inverted L-shaped and extended U-shaped ground for portable communication devices. Chinese Journal of Physics, 2021, 73, 684-694.	2.0	3
54	CONTROLLING A ROTARY SERVO CART SYSTEM USING ROBUST GENERALIZED DYNAMIC INVERSION. International Journal of Robotics and Automation, 2020, 35, .	0.1	3

#	ARTICLE	IF	CITATIONS
55	Comparative study of the effects of phosphorus and boron doping in vapor-liquid-solid growth with fixed flow of silicon gas. Journal of Crystal Growth, 2016, 440, 55-61.	0.7	2
56	Performance analysis of P3HT:PCBM based organic solar cell. , 2017, , .		2
57	Surgical robotic arm control for tissue ablation. Journal of Robotic Surgery, 2020, 14, 881-887.	1.0	2
58	Landing Trajectory Generation and Energy Optimization for Unmanned Lunar Mission. Mathematical Problems in Engineering, 2021, 2021, 1-11.	0.6	2
59	The effect of counter electrodes on the photodegrading performances of azoic dye using TiO <sub>2</sub> nanotubes arrays. Journal of Materials Science: Materials in Electronics, 2021, 32, 22129-22142.	1.1	2
60	Analytical study of Metal-Insulator-Semiconductor contacts for both p- and n-InGaN. Results in Physics, 2020, 19, 103679.	2.0	2
61	Advanced Guidance Scheme for Lunar Descent and Landing from Orbital Speed Conditions. Transactions of the Japan Society for Aeronautical and Space Sciences, 2011, 54, 98-105.	0.4	2
62	Condition Monitoring and Maintenance Management with Grid-Connected Renewable Energy Systems. Computers, Materials and Continua, 2022, 72, 3999-4017.	1.5	2
63	Artificial Intelligence-Based Deep Fusion Model for Pan-Sharpening of Remote Sensing Images. Computational Intelligence and Neuroscience, 2021, 2021, 1-11.	1.1	2
64	Advanced Descent Scheme for Lunar Landing. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 166-171.	0.4	1
65	Estimation of minority carrier lifetime in InGaN single junction solar cell. , 2015, , .		1
66	Robust Generalized Dynamic Inversion Control for Stabilizing Rotary Double Inverted Pendulum. , 2018, , .		1
67	Linear Positional and Speed Control of Servo Carts Using Inverse Dynamic Control. Mathematical Problems in Engineering, 2021, 2021, 1-8.	0.6	1
68	A low-profile planar monopole antenna for ISM/IMT/Bluetooth/Zigbee/WiFi/WiMAX/WLAN wireless communication applications. International Journal of Communication Systems, 2021, 34, e4993.	1.6	1
69	Position control of rotary flexible joint system using adaptive dynamic inversion. IEEJ Transactions on Electrical and Electronic Engineering, 0, , .	0.8	1
70	Heavy metal contamination of surface soils in southern part of Bangladesh. Soil and Environment, 2019, 38, 112-118.	1.1	1
71	Fractional Order Linear Active Disturbance Rejection Control for Linear Flexible Joint System. Computers, Materials and Continua, 2022, 70, 5133-5142.	1.5	1
72	STATE-FEEDBACK-BASED FRACTIONAL-ORDER CONTROL APPROXIMATION FOR A ROTARY FLEXIBLE JOINT SYSTEM. Mechatronic Systems and Control, 2020, 48, .	0.2	1

#	ARTICLE	IF	CITATIONS
73	Balancing a Rotary Double Inverted Pendulum using Two-loops Adaptive Controller based on Dynamic Inversion Technique. , 2021, , .		1
74	Output fluctuations minimization of wind integrated hybrid power system using electronic coordinated control of governor and blade. Journal of Renewable and Sustainable Energy, 2022, 14, .	0.8	1
75	Effect of dislocation density on the performance of InGaN-based MJ solar cell: Analytical approach. , 2015, , .		0
76	Theoretical investigation of Gibb's free energy and phase diagram for In<sub>1-x</sub>Ga<sub>x</sub>N nano-film system. , 2016, , .		0
77	Design and Simulation of Fractional Order Control Scheme for Rotary Flexible Link. , 2018, , .		0
78	Design and Implementation of Robust Generalized Dynamic Inversion Control for Stabilizing Rotary Inverted Pendulum. , 2019, , .		0
79	Study of Ohmic Contact on p-InGaN Using MIGS Model. , 2019, , .		0
80	Fractional data-driven control for a rotary flexible joint system. International Journal of Advanced Robotic Systems, 2021, 18, 172988142199858.	1.3	0
81	Electrical Power Flow Improvement by Reducing Fault Current using FACTS Devices. , 2021, , .		0
82	Temperature-dependent inhomogeneous optical behavior of AlInGaN quaternary alloys. Journal of Optical Technology (A Translation of Opticheski Zhurnal), 2018, 85, 12.	0.2	0
83	Ultra high birefringent dispersion flattened fiber in terahertz regime. Journal of Optical Communications, 2020, .	4.0	0
84	Position Control of Flexible Joint Carts Using Adaptive Generalized Dynamics Inversion. Computers, Materials and Continua, 2022, 70, 4691-4705.	1.5	0
85	Categorization of Webpages using dynamic mutation based differential evolution and gradient boost classifier. Journal of Ambient Intelligence and Humanized Computing, 0, , 1.	3.3	0
86	OBSO Based Fractional PID for MPPT-Pitch Control of Wind Turbine Systems. Computers, Materials and Continua, 2022, 71, 4001-4017.	1.5	0
87	Intelligent Dynamic Inversion Controller Design for Ball and Beam System. Computers, Materials and Continua, 2022, 72, 2341-2355.	1.5	0
88	Non-integer Order Control Scheme for Pressurized Water Reactor Core Power. Computers, Materials and Continua, 2022, 72, 651-662.	1.5	0
89	Hybrid Approach Named HUAPO Technique to Guide the Lander Based on the Landing Trajectory Generation for Unmanned Lunar Mission. Computational Intelligence and Neuroscience, 2022, 2022, 1-16.	1.1	0