Muhammad Enamul Hoque Chowdhury

List of Publications by Citations

101 papers	**1,700** citations	**16** h-index	**38** g-index
114 ext. papers	**3,224** ext. citations	**4** avg, IF	**5.52** L-index

#	Paper	IF	Citations
101	. *IEEE Access*, **2020**, 8, 132665-132676	3.5	431
100	Exploring the effect of image enhancement techniques on COVID-19 detection using chest X-ray images. *Computers in Biology and Medicine*, **2021**, 132, 104319	7	127
99	Transfer Learning with Deep Convolutional Neural Network (CNN) for Pneumonia Detection Using Chest X-ray. *Applied Sciences (Switzerland)*, **2020**, 10, 3233	2.6	116
98	Reference layer artefact subtraction (RLAS): a novel method of minimizing EEG artefacts during simultaneous fMRI. *NeuroImage*, **2014**, 84, 307-19	7.9	71
97	Estimating Blood Pressure from the Photoplethysmogram Signal and Demographic Features Using Machine Learning Techniques. *Sensors*, **2020**, 20,	3.8	59
96	. *IEEE Access*, **2020**, 8, 191586-191601	3.5	57
95	Real-Time Smart-Digital Stethoscope System for Heart Diseases Monitoring. *Sensors*, **2019**, 19,	3.8	56
94	Machine Learning Based Photovoltaics (PV) Power Prediction Using Different Environmental Parameters of Qatar. *Energies*, **2019**, 12, 2782	3.1	49
93	Wearable Real-Time Heart Attack Detection and Warning System to Reduce Road Accidents. *Sensors*, **2019**, 19,	3.8	41
92	. *IEEE Access*, **2020**, 8, 148793-148811	3.5	38
91	A Systematic Approach to the Design and Characterization of A Smart Insole for Detecting Vertical Ground Reaction Force (vGRF) in Gait Analysis. *Sensors*, **2020**, 20,	3.8	33
90	Targeting SARS-CoV2 Spike Protein Receptor Binding Domain by Therapeutic Antibodies. *Biomedicine and Pharmacotherapy*, **2020**, 130, 110559	7.5	29
89	An Early Warning Tool for Predicting Mortality Risk of COVID-19 Patients Using Machine Learning. *Cognitive Computation*, **2021**, 1-16	4.4	26
88	Convolutional Sparse Support Estimator-Based COVID-19 Recognition From X-Ray Images. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, 32, 1810-1820	10.3	23
87	Detection and Severity Classification of COVID-19 in CT Images Using Deep Learning. *Diagnostics*, **2021**, 11,	3.8	19
86	Automatic and Reliable Leaf Disease Detection Using Deep Learning Techniques. *AgriEngineering*, **2021**, 3, 294-312	2.2	19
85	Portable System for Monitoring and Controlling Driver Behavior and the Use of a Mobile Phone While Driving. *Sensors*, **2019**, 19,	3.8	16

84	COVID-19 infection map generation and detection from chest X-ray images. *Health Information Science and Systems*, **2021**, 9, 15	5.1	15
83	A machine learning model for early detection of diabetic foot using thermogram images. *Computers in Biology and Medicine*, **2021**, 137, 104838	7	15
82	A review of deep learning-based detection methods for COVID-19.. *Computers in Biology and Medicine*, **2022**, 143, 105233	7	14
81	Design and parametric analysis of a wide-angle polarization-insensitive metamaterial absorber with a star shape resonator for optical wavelength applications. *Results in Physics*, **2020**, 18, 103259	3.7	14
80	Test implementation of a sensor device for measuring soil macronutrients **2015**,		13
79	Case Study to Analyze the Impact of Multi-Course Project-Based Learning Approach on Education for Sustainable Development. *Sustainability*, **2020**, 12, 480	3.6	13
78	A Low Noise Capacitive Electromyography Monitoring System for Remote Healthcare Applications. *IEEE Sensors Journal*, **2020**, 20, 3333-3342	4	13
77	Design, Construction and Testing of IoT Based Automated Indoor Vertical Hydroponics Farming Test-Bed in Qatar. *Sensors*, **2020**, 20,	3.8	13
76	An Intelligent and Low-Cost Eye-Tracking System for Motorized Wheelchair Control. *Sensors*, **2020**, 20,	3.8	13
75	Modified-Segmented Split-Ring Based Polarization and Angle-Insensitive Multi-Band Metamaterial Absorber for X, Ku and K Band Applications. *IEEE Access*, **2020**, 8, 144051-144063	3.5	12
74	. *IEEE Access*, **2020**, 8, 185698-185724	3.5	12
73	Simultaneous EEG-fMRI: evaluating the effect of the cabling configuration on the gradient artefact. *Physics in Medicine and Biology*, **2015**, 60, N241-50	3.8	10
72	COV-ECGNET: COVID-19 detection using ECG trace images with deep convolutional neural network.. *Health Information Science and Systems*, **2022**, 10, 1	5.1	10
71	Multimodal EEG and Keystroke Dynamics Based Biometric System Using Machine Learning Algorithms. *IEEE Access*, **2021**, 9, 94625-94643	3.5	10
70	A Low-Cost Closed-Loop Solar Tracking System Based on the Sun Position Algorithm. *Journal of Sensors*, **2019**, 2019, 1-11	2	9
69	COVID-19 infection localization and severity grading from chest X-ray images. *Computers in Biology and Medicine*, **2021**, 139, 105002	7	9
68	Custom Hardware Architectures for Deep Learning on Portable Devices: A Review. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, PP,	10.3	9
67	. *IEEE Access*, **2021**, 9, 41052-41065	3.5	9

66	Performance analysis of noninvasive electrophysiological methods for the assessment of diabetic sensorimotor polyneuropathy in clinical research: a systematic review and meta-analysis with trial sequential analysis. *Scientific Reports*, **2020**, 10, 21770	4.9	8
65	Exploring the origins of EEG motion artefacts during simultaneous fMRI acquisition: Implications for motion artefact correction. *NeuroImage*, **2018**, 173, 188-198	7.9	8
64	SNG and DNG meta-absorber with fractional absorption band for sensing application. *Scientific Reports*, **2020**, 10, 13086	4.9	8
63	Cross coupled interlinked split ring resonator based epsilon negative metamaterial with high effective medium ratio for multiband satellite and radar communications. *Results in Physics*, **2020**, 18, 103296	3.7	8
62	A Portable Electromagnetic Head Imaging System Using Metamaterial Loaded Compact Directional 3D Antenna. *IEEE Access*, **2021**, 9, 50893-50906	3.5	8
61	Development and Validation of an Early Scoring System for Prediction of Disease Severity in COVID-19 Using Complete Blood Count Parameters. *IEEE Access*, **2021**, 9, 120422-120441	3.5	8
60	Diabetic Sensorimotor Polyneuropathy Severity Classification Using Adaptive Neuro Fuzzy Inference System. *IEEE Access*, **2021**, 9, 7618-7631	3.5	8
59	A YOLOv3 Deep Neural Network Model to Detect Brain Tumor in Portable Electromagnetic Imaging System. *IEEE Access*, **2021**, 9, 82647-82660	3.5	8
58	Tribo-mechanical properties evaluation of HA/TiO/CNT nanocomposite. *Scientific Reports*, **2021**, 11, 1867	4.9	8
57	Mortality Prediction Utilizing Blood Biomarkers to Predict the Severity of COVID-19 Using Machine Learning Technique. *Diagnostics*, **2021**, 11,	3.8	8
56	A Novel Non-Invasive Estimation of Respiration Rate From Motion Corrupted Photoplethysmograph Signal Using Machine Learning Model. *IEEE Access*, **2021**, 9, 96775-96790	3.5	8
55	Fire-Detectors Review and Design of an Automated, Quick Responsive Fire-Alarm System Based on SMS. *International Journal of Communications, Network and System Sciences*, **2014**, 07, 386-395	0.2	7
54	Depot fluphenazine and flupenthixol in the treatment of stabilized schizophrenics. A double-blind comparative trial. *Comprehensive Psychiatry*, **1980**, 21, 135-9	7.3	7
53	Review on Medical Implantable Antenna Technology and Imminent Research Challenges. *Sensors*, **2021**, 21,	3.8	7
52	Angle-insensitive co-polarized metamaterial absorber based on equivalent circuit analysis for dual band WiFi applications. *Scientific Reports*, **2021**, 11, 13791	4.9	7
51	A Planar Ultrawideband Patch Antenna Array for Microwave Breast Tumor Detection. *Materials*, **2020**, 13,	3.5	6
50	Design and Implementation of a RF Based Anti-Drone System **2020**,		6
49	Investigating the effect of modifying the EEG cap lead configuration on the gradient artifact in simultaneous EEG-fMRI. *Frontiers in Neuroscience*, **2014**, 8, 226	5.1	6

48	A Case Study to Identify the Hindrances to Widespread Adoption of Electric Vehicles in Qatar. *Energies*, **2020**, 13, 3994	3.1	6
47	Synthesis and characterization of Mg-Zn ferrite based flexible microwave composites and its application as SNG metamaterial. *Scientific Reports*, **2021**, 11, 7654	4.9	6
46	Effects of titanium and carbon nanotubes on nano/micromechanical properties of HA/TNT/CNT nanocomposites. *Applied Surface Science*, **2021**, 538, 148123	6.7	6
45	Robust R-Peak Detection in Low-Quality Holter ECGs using 1D Convolutional Neural Network. *IEEE Transactions on Biomedical Engineering*, **2021**, PP,	5	6
44	Effects of the Phantom Shape on the Gradient Artefact of Electroencephalography (EEG) Data in Simultaneous EEG-fMRI. *Applied Sciences (Switzerland)*, **2018**, 8, 1969	2.6	6
43	Deep learning based classification of unsegmented phonocardiogram spectrograms leveraging transfer learning. *Physiological Measurement*, **2021**, 42,	2.9	6
42	Simultaneous EEG-fMRI: Evaluating the Effect of the EEG Cap-Cabling Configuration on the Gradient Artifact. *Frontiers in Neuroscience*, **2019**, 13, 690	5.1	5
41	EDITH : ECG Biometrics Aided by Deep Learning for Reliable Individual Authentication. *IEEE Transactions on Emerging Topics in Computational Intelligence*, **2021**, 1-13	4.1	5
40	Deep Learning for Reliable Classification of COVID-19, MERS, and SARS from Chest X-ray Images.. *Cognitive Computation*, **2022**, 1-21	4.4	5
39	QCovSML: A reliable COVID-19 detection system using CBC biomarkers by a stacking machine learning model.. *Computers in Biology and Medicine*, **2022**, 143, 105284	7	5
38	Machine Learning in Wearable Biomedical Systems		5
37	A mutual coupled concentric crossed-Line split ring resonator (CCSRR) based epsilon negative (ENG) metamaterial for Tri-band microwave applications. *Results in Physics*, **2020**, 18, 103292	3.7	5
36	Performance Analysis of Conventional Machine Learning Algorithms for Diabetic Sensorimotor Polyneuropathy Severity Classification. *Diagnostics*, **2021**, 11,	3.8	5
35	Analysis of visual cortex-event-related fMRI data using ICA decomposition. *International Journal of Biomedical Engineering and Technology*, **2011**, 7, 365	1.3	4
34	Bangla Sign Language (BdSL) Alphabets and Numerals Classification Using a Deep Learning Model.. *Sensors*, **2022**, 22,	3.8	4
33	A biomarker based severity progression indicator for COVID-19: the Kuwait prognosis indicator score. *Biomarkers*, **2020**, 25, 641-648	2.6	4
32	Microwave Breast Imaging Using Compressed Sensing Approach of Iteratively Corrected Delay Multiply and Sum Beamforming. *Diagnostics*, **2021**, 11,	3.8	4
31	Inductively tuned modified split ring resonator based quad band epsilon negative (ENG) with near zero index (NZI) metamaterial for multiband antenna performance enhancement. *Scientific Reports*, **2021**, 11, 11950	4.9	4

30	Reference Layer Artefact Subtraction (RLAS): Electromagnetic Simulations. *IEEE Access*, **2019**, 7, 17882-17895	3.9	4
29	Estimating the Relative Crystallinity of Biodegradable Polylactic Acid and Polyglycolide Polymer Composites by Machine Learning Methodologies.. *Polymers*, **2022**, 14,	4.5	3
28	Wind Power Integration with Smart Grid and Storage System: Prospects and Limitations. *International Journal of Advanced Computer Science and Applications*, **2020**, 11,	1.7	3
27	Brain MR Image Enhancement for Tumor Segmentation Using 3D U-Net. *Sensors*, **2021**, 21,	3.8	3
26	A New Wearable ECG Monitor Evaluation and Experimental Analysis: Proof of Concept **2020**,		3
25	Characterization of capacitive electromyography biomedical sensor insulated with porous medical bandages. *Scientific Reports*, **2020**, 10, 14891	4.9	3
24	Case Study of Multi-Course Project-Based Learning and Online Assessment in Electrical Engineering Courses during COVID-19 Pandemic. *Sustainability*, **2022**, 14, 5056	3.6	3
23	Surround-Screen Mobile based Projection: Design and Implementation of Mobile Cave Virtual Reality. *IEEE Access*, **2017**, 1-1	3.5	2
22	Broadband over Power Line (BPL): An Emerging Technology for Bangladesh. *International Journal of Communications, Network and System Sciences*, **2014**, 07, 346-354	0.2	2
21	Tomato Leaf Diseases Detection Using Deep Learning Technique		2
20	Photo-Voltaic (PV) Monitoring System, Performance Analysis and Power Prediction Models in Doha, Qatar		2
19	Thermal Change Index-Based Diabetic Foot Thermogram Image Classification Using Machine Learning Techniques.. *Sensors*, **2022**, 22,	3.8	2
18	Deep learning techniques for liver and liver tumor segmentation: A review. *Computers in Biology and Medicine*, **2022**, 147, 105620	7	2
17	Analysis of Morphological Brain Change of Alzheimer Disease (AD) Patients. *Applied Physics Research*, **2010**, 2,	1.3	1
16	Robust biometric system using session invariant multimodal EEG and keystroke dynamics by the ensemble of self-ONNs.. *Computers in Biology and Medicine*, **2022**, 142, 105238	7	1
15	An investigation to study the effects of Tai Chi on human gait dynamics using classical machine learning.. *Computers in Biology and Medicine*, **2022**, 142, 105184	7	1
14	A nomogram-based diabetic sensorimotor polyneuropathy severity prediction using Michigan neuropathy screening instrumentations. *Computers in Biology and Medicine*, **2021**, 139, 104954	7	1
13	Finite Element Analysis of the Mechanism of Traumatic Aortic Rupture (TAR). *Computational and Mathematical Methods in Medicine*, **2020**, 2020, 6718495	2.8	1

List of Publications

12	Instrumented Hip Implant: A Review. *IEEE Sensors Journal*, **2021**, 21, 7179-7194	4	1
11	Quad-band flexible magnesium zinc ferrite (MgZnFe2O4)-based double negative metamaterial for microwave applications *Chinese Journal of Physics*, **2021**, 71, 351-364	3.5	1
10	HipXNet: Deep Learning Approaches to Detect Aseptic Loos-ening of Hip Implants using X-Ray Images. *IEEE Access*, **2022**, 1-1	3.5	1
9	A Comprehensive Review and the Efficiency Analysis of Horizontal and Vertical Axis Wind Turbines. *European Journal of Sustainable Development Research*, **2021**, 5, em0163	1.6	0
8	Investigating the effect of materials and structures for negative pressure ventilators suitable for pandemic situation. *Emergent Materials*, **2021**, 4, 1-15	3.5	0
7	. *IEEE Access*, **2021**, 9, 59148-59159	3.5	0
6	Motion Artifacts Correction From EEG and fNIRS Signals Using Novel Multiresolution Analysis. *IEEE Access*, **2022**, 10, 29760-29777	3.5	0
5	Performance Analysis of Conventional Machine Learning Algorithms for Diabetic Sensorimotor Polyneuropathy Severity Classification Using Nerve Conduction Studies.. *Computational Intelligence and Neuroscience*, **2022**, 2022, 9690940	3	0
4	A Novel Machine Learning Approach for Severity Classification of Diabetic Foot Complications Using Thermogram Images. *Sensors*, **2022**, 22, 4249	3.8	0
3	Corrigendum to A Low-Cost Closed-Loop Solar Tracking System Based on the Sun Position Algorithm *Journal of Sensors*, **2019**, 2019, 1-1	2	
2	Future Techniques and Perspectives on Implanted and Wearable Heart Failure Detection Devices **2022**, 295-319		
1	Wearable Real-Time Epileptic Seizure Detection and Warning System **2022**, 233-265		