

# Mounir Boukadoum

## List of Publications by Year in descending order

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Version: 2024-02-01

108  
papers

1,597  
citations

331670

21  
h-index

361022

35  
g-index

109  
all docs

109  
docs citations

109  
times ranked

1445  
citing authors

#	ARTICLE	IF	CITATIONS
1	End-to-End Dialogue Generation Using a Single Encoder and a Decoder Cascade With a Multidimension Attention Mechanism. IEEE Transactions on Neural Networks and Learning Systems, 2022, PP, 1-11.	11.3	1
2	Molecular sensing system based on multi-technologies architecture. , 2022, , .		0
3	Towards an advanced neurotechnological system: colorimetric sensing with a novel grism-based spectrometer, functionalized gold nanoparticles and a heterogeneous embedded system. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, .	3.4	3
4	Design of an Integrated Micro-Viscometer for Monitoring Engine Oil. Sensors, 2022, 22, 5157.	3.8	0
5	Aptamer-Modified Ultrastable Gold Nanoparticles for Dopamine Detection. IEEE Sensors Journal, 2021, 21, 2517-2525.	4.7	8
6	Classical and Brain-inspired Neural Networks for Substance Identification and Breast Cancer Detection: The Chaos Challenge. , 2021, , .		2
7	Intuitive real-time control strategy for high-density myoelectric hand prosthesis using deep and transfer learning. Scientific Reports, 2021, 11, 11275.	3.3	33
8	Wireless Sensor Network and Irrigation System to Monitor Wheat Growth under Drought Stress. , 2021, , .		4
9	Dealing With Noise and Partial Volume Effects in Alzheimer Disease Brain Tissue Classification by a Fuzzy-Possibilistic Modeling Based on Fuzzy-Genetic Initialization. , 2021, , 267-294.		0
10	Colorimetric Sensing System for Neurotransmitter Detection Based on Multi-technologies Architecture. , 2021, , .		2
11	A Fully Embedded Adaptive Real-Time Hand Gesture Classifier Leveraging HD-sEMG and Deep Learning. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 232-243.	4.0	94
12	A Survey on Computer-Aided Diagnosis of Brain Disorders through MRI Based on Machine Learning and Data Mining Methodologies with an Emphasis on Alzheimer Disease Diagnosis and the Contribution of the Multimodal Fusion. Applied Sciences (Switzerland), 2020, 10, 1894.	2.5	24
13	Assessment of a Grism- Based Spectrometer Design for Neurotransmitter Detection. , 2020, , .		3
14	Computer-Aided Diagnosis System of Alzheimer's Disease Based on Multimodal Fusion: Tissue Quantification Based on the Hybrid Fuzzy-Genetic-Possibilistic Model and Discriminative Classification Based on the SVDD Model. Brain Sciences, 2019, 9, 289.	2.3	21
15	Dealing With Noise and Partial Volume Effects in Alzheimer Disease Brain Tissue Classification by a Fuzzy-Possibilistic Modeling Based on Fuzzy-Genetic Initialization. International Journal of Software Innovation, 2019, 7, 119-143.	0.4	1
16	A Review of Neurotransmitters Sensing Methods for Neuro-Engineering Research. Applied Sciences (Switzerland), 2019, 9, 4719.	2.5	60
17	Offline and Online Scheduling Algorithms for Energy Harvesting RSUs in VANETs. IEEE Transactions on Vehicular Technology, 2018, 67, 6370-6382.	6.3	36
18	A loop-based neural architecture for structured behavior encoding and decoding. Neural Networks, 2018, 98, 318-336.	5.9	2

#	ARTICLE	IF	CITATIONS
19	Microfluidic H-filter Cell Modeling for Robust Purification of Gold Nanoparticles. , 2018, , .		0
20	Fully parallel FPGA Implementation of an Artificial Neural Network Tuned by Genetic Algorithm. , 2018, , .		2
21	Microfluidic Spectrophotometer for Neurotransmitter Detection Based on Gold Nanoparticles: Preliminary Results. , 2018, 2018, 3854-3857.		3
22	Improved Electromyography Signal Modeling for Myopathy Detection. , 2018, , .		5
23	Tissue segmentation by fuzzy clustering technique: case study on Alzheimer's disease. , 2018, , .		1
24	A comparison of four PDE-spatial denoising systems for molecular images. , 2017, , .		1
25	EAM: Energy Aware Mobility over wireless sensor networks. , 2017, , .		2
26	HMM/MLP speech recognition system using a novel data clustering approach. , 2017, , .		2
27	An accurate automatic system for distinguishing neuropathy and healthy electromyography signals. , 2017, , .		5
28	Brain Tissues Volumes Assessment by Fuzzy Genetic Optimization Based Possibilistic Clustering: Application to Alzheimer Patients Images. , 2017, , .		2
29	Fuzzy clustering optimized with genetic algorithms: Application for hybrid speech recognition system. , 2017, , .		1
30	Brain tissue classification of alzheimer disease using partial volume possibilistic modeling: Application to ADNI phantom images. , 2017, , .		2
31	Miniaturized FDDA and CMOS Based Potentiostat for Bio-Applications. Sensors, 2017, 17, 810.	3.8	10
32	Single SNN Architecture for Classical and Operant Conditioning using Reinforcement Learning. International Journal of Cognitive Informatics and Natural Intelligence, 2017, 11, 1-24.	0.4	4
33	Diagnosis of Auditory Pathologies with Hidden Markov Models. Lecture Notes in Computer Science, 2017, , 118-133.	1.3	0
34	Brain-inspired pattern classification with memristive neural network using the Hodgkin-Huxley neuron. , 2016, , .		5
35	Scheduling Energy Harvesting Roadside Units in Vehicular Ad Hoc Networks. , 2016, , .		8
36	Robotic implementation of classical and operant conditioning within a single SNN architecture. , 2016, , .		1

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37	A novel wireless ring-shaped multi-site pulse oximeter. , 2016, , .		3
38	Combined partial differential equation filtering and particle swarm optimization for noisy biomedical image segmentation. , 2016, , .		6
39	Real-time CPU-GPU demodulator for the LTE physical layer. , 2016, , .		2
40	Towards code generation for ARM Cortex-M MCUs from SysML activity diagrams. , 2016, , .		1
41	A wide range and high sensitivity four-channel compact electrochemical biosensor for neurotransmitter detection on a microfluidic platform. , 2016, 2016, 5753-5756.		1
42	Robotic implementation of classical and Operant Conditioning as a single STDP learning process. , 2016, , .		7
43	FPGA minimal components SKAN model for classical and operant conditioning. , 2016, , .		6
44	Fractals in Neuroimaging. Springer Series in Computational Neuroscience, 2016, , 295-309.	0.3	1
45	Formal modeling, verification and implementation of a train control system. , 2015, , .		0
46	Chaotic Liquid State Machine. International Journal of Cognitive Informatics and Natural Intelligence, 2015, 9, 1-20.	0.4	4
47	RF-LNA circuit synthesis using an array of artificial neural networks with constrained inputs. , 2015, , .		9
48	A weighted bio-signal denoising approach using empirical mode decomposition. Biomedical Engineering Letters, 2015, 5, 131-139.	4.1	38
49	Computational Analyses of Arteriovenous Malformations in Neuroimaging. Journal of Neuroimaging, 2015, 25, 354-360.	2.0	17
50	Intelligent Ensemble Forecasting System of Stock Market Fluctuations Based on Symetric and Asymetric Wavelet Functions. Fluctuation and Noise Letters, 2015, 14, 1550033.	1.5	21
51	Operant conditioning: a minimal components requirement in artificial spiking neurons designed for bio-inspired robot's controller. Frontiers in Neurorobotics, 2014, 8, 21.	2.8	19
52	Biomedical image denoising using variational mode decomposition. , 2014, , .		47
53	Detrended fluctuation analysis of brain hemisphere magnetic resonance images to detect cerebral arteriovenous malformations. , 2014, , .		12
54	Fractal-based arteriovenous malformations detection in brain magnetic resonance images. , 2014, , .		6

#	ARTICLE	IF	CITATIONS
55	Enhanced Particle Swarm Optimization algorithm with reuse guided retrieval capabilities. , 2014, , .		0
56	Automated detection of circinate exudates in retina digital images using empirical mode decomposition and the entropy and uniformity of the intrinsic mode functions. Biomedizinische Technik, 2014, 59, 357-66.	0.8	19
57	RF-LNA circuit synthesis by genetic algorithm-specified artificial neural network. , 2014, , .		8
58	Improved global-best particle swarm optimization algorithm with mixed-attribute data classification capability. Applied Soft Computing Journal, 2014, 21, 554-567.	7.2	22
59	Adaptive block SSA based ANC implementation for high performances ECG removal from sEMG signals. , 2014, , .		0
60	Time Frequency noise canceller for an optimized separation of the ECG from low back sEMG signals. , 2014, , .		1
61	Adjusted empirical mode decomposition with improved performance for signal modeling and prediction. , 2014, , .		4
62	New approach for automatic classification of Alzheimer's disease, mild cognitive impairment and healthy brain magnetic resonance images. Healthcare Technology Letters, 2014, 1, 32-36.	3.3	44
63	Exploring Information Categories and Artificial Neural Networks Numerical Algorithms in S&P500 Trend Prediction. International Journal of Strategic Decision Sciences, 2014, 5, 76-94.	0.0	16
64	Enhanced Global Best Particle Swarm Classification. International Journal of Software Science and Computational Intelligence, 2014, 6, 1-15.	3.0	3
65	A Particle Swarm Optimization Approach for Reuse Guided Case Retrieval. International Journal of Software Science and Computational Intelligence, 2014, 6, 16-30.	3.0	6
66	An application of the empirical mode decomposition to brain magnetic resonance images classification. , 2013, , .		4
67	Autonomous sensor system for deep-sea pipeline monitoring. , 2013, , .		5
68	Maintainability defects detection and correction: a multi-objective approach. Automated Software Engineering, 2013, 20, 47-79.	2.9	120
69	Lobe asymmetry-based automatic classification of brain magnetic resonance images. , 2013, , .		1
70	Particle swarm classification: A survey and positioning. Pattern Recognition, 2013, 46, 2028-2044.	8.1	51
71	Comparison of Two CMOS Front-End Transimpedance Amplifiers for Optical Biosensors. IEEE Sensors Journal, 2013, 13, 657-663.	4.7	21
72	Automatic detection of Alzheimer disease in brain magnetic resonance images using fractal features. , 2013, , .		9

#	ARTICLE	IF	CITATIONS
73	Information fusion and S&P500 trend prediction. , 2013, , .		0
74	FROM ADAPTATION-GUIDED RETRIEVAL TO REUSE-GUIDED RETRIEVAL: APPLICATION TO CASE RETRIEVAL NET MEMORY MODEL. International Journal of Information Technology and Decision Making, 2013, 12, 757-787.	3.9	9
75	Wavelet compression inspired implementation for high performances and low complexity ECG removal in wireless sEMG electrodes. , 2013, , .		0
76	Habituation: a non-associative learning rule design for spiking neurons and an autonomous mobile robots implementation. Bioinspiration and Biomimetics, 2013, 8, 016007.	2.9	4
77	Hybrid Discrete Wavelet Transform and Gabor Filter Banks Processing for Features Extraction from Biomedical Images. Journal of Medical Engineering, 2013, 2013, 1-13.	1.1	55
78	Alzheimer's Disease Detection in Brain Magnetic Resonance Images Using Multiscale Fractal Analysis. ISRN Radiology, 2013, 2013, 1-7.	1.2	26
79	A Supervised Classification System of Financial Data Based on Wavelet Packet and Neural Networks. International Journal of Strategic Decision Sciences, 2013, 4, 72-84.	0.0	13
80	A 500 MHz to 6 GHz frequency synthesizer architecture for cognitive radio applications. , 2012, , .		1
81	MDC-SAT: an automated methodology for efficient safety checking. International Journal of Critical Computer-Based Systems, 2012, 3, 4.	0.1	3
82	Automatic brain MR images diagnosis based on edge fractal dimension and spectral energy signature. , 2012, 2012, 6243-6.		10
83	Special issue on IEEE-NEWCAS 2010-2011. Analog Integrated Circuits and Signal Processing, 2012, 73, 661-662.	1.4	0
84	Fractal dimension and high order statistics of spectral energy distribution as features for pathology detection in brain MR images. , 2012, , .		2
85	Classical conditioning in different temporal constraints: an STDP learning rule for robots controlled by spiking neural networks. Adaptive Behavior, 2012, 20, 257-272.	1.9	14
86	Search-based model transformation by example. Software and Systems Modeling, 2012, 11, 209-226.	2.7	67
87	A high-speed, low input current CMOS integrated front end for multi-spectral photodiode arrays. , 2011, , .		0
88	Hybrid cosine and Radon transform-based processing for digital mammogram feature extraction and classification with SVM. , 2011, 2011, 5104-7.		6
89	Hybrid discrete wavelet transform and Gabor filter banks processing for mammogram features extraction. , 2011, , .		10
90	DWT and RT-based approach for feature extraction and classification of mammograms with SVM. , 2011, , .		7

#	ARTICLE	IF	CITATIONS
91	Mechanisms Gating the Flow of Information in the Cortex: What They Might Look Like and What Their Uses may be. <i>Frontiers in Computational Neuroscience</i> , 2011, 5, 1.	2.1	108
92	Example-based model-transformation testing. <i>Automated Software Engineering</i> , 2011, 18, 199-224.	2.9	20
93	Encoding Static and Temporal Patterns with a Bidirectional Heteroassociative Memory. <i>Journal of Applied Mathematics</i> , 2011, 2011, 1-34.	0.9	10
94	A Particle Swarm Optimization Approach for the Case Retrieval Stage in CBR. , 2011, , 209-222.		2
95	SAT based model checking for MDG models. , 2010, , .		0
96	Particle Swarm Classification for High Dimensional Data Sets. , 2010, , .		10
97	Example-Based Sequence Diagrams to Colored Petri Nets Transformation Using Heuristic Search. <i>Lecture Notes in Computer Science</i> , 2010, , 156-172.	1.3	14
98	A Multihit Time-to-Digital Converter Architecture on FPGA. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2009, 58, 530-540.	4.7	37
99	Pseudorandom Stimuli Generation for Testing Time-to-Digital Converters on an FPGA. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2009, 58, 2209-2215.	4.7	17
100	AI-SIMCOG: a simulator for spiking neurons and multiple animals™ behaviours. <i>Neural Computing and Applications</i> , 2009, 18, 431-446.	5.6	16
101	BAM Learning of Nonlinearly Separable Tasks by Using an Asymmetrical Output Function and Reinforcement Learning. <i>IEEE Transactions on Neural Networks</i> , 2009, 20, 1281-1292.	4.2	21
102	A nonlinear dynamic artificial neural network model of memory. <i>New Ideas in Psychology</i> , 2008, 26, 252-277.	1.9	33
103	Model Transformation as an Optimization Problem. <i>Lecture Notes in Computer Science</i> , 2008, , 159-173.	1.3	55
104	On the Timing Uncertainty in Delay-Line-based Time Measurement Applications Targeting FPGAs. , 2007, , .		15
105	A Bidirectional Heteroassociative Memory for Binary and Grey-Level Patterns. <i>IEEE Transactions on Neural Networks</i> , 2006, 17, 385-396.	4.2	69
106	A Sequential Dynamic Heteroassociative Memory for Multistep Pattern Recognition and One-to-Many Association. <i>IEEE Transactions on Neural Networks</i> , 2006, 17, 59-68.	4.2	24
107	An Investigation of the Physical Forces Leading to Thrombosis Disruption by Cavitation. <i>Journal of Thrombosis and Thrombolysis</i> , 2005, 20, 27-32.	2.1	7
108	A NEW DIGITAL SCAN CONVERSION ARCHITECTURE FOR ULTRASONIC IMAGING SYSTEMS. <i>Journal of Circuits, Systems and Computers</i> , 2005, 14, 367-382.	1.5	8