

# Fady Alnajjar

## List of Publications by Year in descending order

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Version: 2024-02-01

99  
papers

1,477  
citations

331538  
21  
h-index

414303  
32  
g-index

105  
all docs

105  
docs citations

105  
times ranked

1277  
citing authors

#	ARTICLE	IF	CITATIONS
1	Robotic assistive and rehabilitation devices leading to motor recovery in upper limb: a systematic review. Disability and Rehabilitation: Assistive Technology, 2023, 18, 658-672.	1.3	15
2	A simulated measurement for COVID-19 pandemic using the effective reproductive number on an empirical portion of population: epidemiological models. Neural Computing and Applications, 2023, 35, 22813-22821.	3.2	2
3	Exploring serious games for stroke rehabilitation: a scoping review. Disability and Rehabilitation: Assistive Technology, 2022, 17, 159-165.	1.3	33
4	Emotion and memory model for social robots: a reinforcement learning based behaviour selection. Behaviour and Information Technology, 2022, 41, 3210-3236.	2.5	1
5	The Effect of Visual, Auditory, Tactile and Cognitive Feedback in Motor Skill Training: A Pilot Study Based on VR Gaming. Biosystems and Biorobotics, 2022, , 445-449.	0.2	1
6	A simplified real-time camera-based attention assessment system for classrooms: pilot study. Education and Information Technologies, 2022, 27, 4753-4770.	3.5	6
7	An explainable machine learning framework for lung cancer hospital length of stay prediction. Scientific Reports, 2022, 12, 607.	1.6	49
8	Smart Classroom: A Deep Learning Approach towards Attention Assessment through Class Behavior Detection. , 2022, , .		6
9	SHEL5K: An Extended Dataset and Benchmarking for Safety Helmet Detection. Sensors, 2022, 22, 2315.	2.1	18
10	Clarify Sit-to-Stand Muscle Synergy and Tension Changes in Subacute Stroke Rehabilitation by Musculoskeletal Modeling. Frontiers in Systems Neuroscience, 2022, 16, 785143.	1.2	3
11	Bibliometric Analysis and Review of Deep Learning-Based Crack Detection Literature Published between 2010 and 2022. Buildings, 2022, 12, 432.	1.4	19
12	HCI Research in the Middle East and North Africa: A Bibliometric and Socioeconomic Overview. International Journal of Human-Computer Interaction, 2022, 38, 1546-1562.	3.3	5
13	Efficacy of Emerging Technologies to Manage Childhood Obesity. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy, 2022, Volume 15, 1227-1244.	1.1	11
14	A Taste of Armageddon: A Virtue Ethics Perspective on Autonomous Weapons and Moral Injury. Journal of Military Ethics, 2022, 21, 19-38.	0.1	3
15	Bidirectional parallel echo state network for speech emotion recognition. Neural Computing and Applications, 2022, 34, 17581-17599.	3.2	6
16	Personalized Robot Interventions for Autistic Children: An Automated Methodology for Attention Assessment. International Journal of Social Robotics, 2021, 13, 67-82.	3.1	26
17	The new norm: Computer Science conferences respond to COVID-19. Scientometrics, 2021, 126, 1813-1827.	1.6	14
18	Trends and Technologies in Rehabilitation of Foot Drop: A Systematic Review. Expert Review of Medical Devices, 2021, 18, 31-46.	1.4	24

#	ARTICLE	IF	CITATIONS
19	Performance Evaluation of different Algorithms for Crack Detection in Concrete Structures. , 2021, , .		7
20	AI applications in robotics, diagnostic image analysis and precision medicine: Current limitations, future trends, guidelines on CAD systems for medicine. Informatics in Medicine Unlocked, 2021, 24, 100596.	1.9	41
21	Autism Spectrum Self-Stimulatory Behaviors Classification Using Explainable Temporal Coherency Deep Features and SVM Classifier. IEEE Access, 2021, 9, 34264-34275.	2.6	23
22	Speech Emotion Recognition by Late Fusion for Bidirectional Reservoir Computing With Random Projection. IEEE Access, 2021, 9, 122855-122871.	2.6	10
23	Technology, Privacy, and User Opinions of COVID-19 Mobile Apps for Contact Tracing: Systematic Search and Content Analysis. Journal of Medical Internet Research, 2021, 23, e23467.	2.1	67
24	Performance Evaluation of Deep CNN-Based Crack Detection and Localization Techniques for Concrete Structures. Sensors, 2021, 21, 1688.	2.1	114
25	Mechanical performance of three-dimensional printed sandwich composite with a high-flexible core. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2021, 235, 1382-1400.	0.7	10
26	Towards Privacy-Preserved Aging in Place: A Systematic Review. Sensors, 2021, 21, 3082.	2.1	16
27	Analysis of muscle synergy and kinematics in sit-to-stand motion of hemiplegic patients in subacute period. Advanced Robotics, 2021, 35, 867-877.	1.1	5
28	CHAD: Compact Hand-Assistive Device for enhancement of function in hand impairments. Robotics and Autonomous Systems, 2021, 142, 103784.	3.0	7
29	Binary Sensors-Based Privacy-Preserved Activity Recognition of Elderly Living Alone Using an RNN. Sensors, 2021, 21, 5371.	2.1	10
30	MH UNet: A Multi-Scale Hierarchical Based Architecture for Medical Image Segmentation. IEEE Access, 2021, 9, 148384-148408.	2.6	25
31	Kano Model Integration with Data Mining to Predict Customer Satisfaction. Big Data and Cognitive Computing, 2021, 5, 66.	2.9	8
32	Classification of Motor Impairments of Post-Stroke Patients Based on Force Applied to a Handrail. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 2399-2406.	2.7	6
33	Grouped Echo State Network with Late Fusion for Speech Emotion Recognition. Lecture Notes in Computer Science, 2021, , 431-442.	1.0	2
34	Ultra-Low Resolution Infrared Sensor-Based Wireless Sensor Network for Privacy-Preserved Recognition of Daily Activities of Living. , 2021, , .		3
35	Modeling of a biped robot for investigating foot drop using MATLAB/Simulink. Simulation Modelling Practice and Theory, 2020, 98, 101972.	2.2	10
36	Self-Support Biofeedback Training for Recovery From Motor Impairment After Stroke. IEEE Access, 2020, 8, 72138-72157.	2.6	15

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37	COVID-19 Global Risk: Expectation vs. Reality. International Journal of Environmental Research and Public Health, 2020, 17, 5592.	1.2	12
38	Measurement Method for Evaluating the Lockdown Policies during the COVID-19 Pandemic. International Journal of Environmental Research and Public Health, 2020, 17, 5574.	1.2	20
39	Lownet: Privacy Preserved Ultra-Low Resolution Posture Image Classification. , 2020, , .		5
40	Global and Temporal COVID-19 Risk Evaluation. Frontiers in Public Health, 2020, 8, 440.	1.3	12
41	Implementing FDM 3D Printing Strategies Using Natural Fibers to Produce Biomass Composite. Materials, 2020, 13, 4065.	1.3	64
42	Can a robot invigilator prevent cheating?. AI and Society, 2020, 35, 981-989.	3.1	10
43	Advances in neuroprosthetic management of foot drop: a review. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 46.	2.4	41
44	Assistive and Rehabilitation Robotics for Upper Limb Impairments in Post-Stroke Patients: Evaluation Criteria for the Design and Functionality. , 2020, , .		2
45	Robots, AI, and Cognitive Training in an Era of Mass Age-Related Cognitive Decline: A Systematic Review. IEEE Access, 2020, 8, 18284-18304.	2.6	27
46	Temporal Muscle Synergy Features Estimate Effects of Short-Term Rehabilitation in Sit-to-Stand of Post-Stroke Patients. IEEE Robotics and Automation Letters, 2020, 5, 1796-1802.	3.3	8
47	Fresh and Hardened Properties of 3D-Printed Concrete Made with Dune Sand. RILEM Bookseries, 2020, , 225-234.	0.2	3
48	AI and Robotics-Based Cognitive Training for Elderly: A Systematic Review. , 2020, , .		1
49	Analysis of muscle activation patterns during walking in patients with foot drop: insights for the design of an advanced FES controller. , 2019, , .		2
50	A Low-Cost Autonomous Attention Assessment System for Robot Intervention with Autistic Children. , 2019, , .		11
51	Theoretical approach for designing the rehabilitation robot controller. Advanced Robotics, 2019, 33, 674-686.	1.1	3
52	Temporal Features of Muscle Synergies in Sit-to-Stand Motion Reflect the Motor Impairment of Post-Stroke Patients. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 2118-2127.	2.7	39
53	Foot Modelling for Investigating Foot-Drop Problem Using Biomechanical Legs. , 2019, , .		1
54	Label Self-Advised Support Vector Machine (LSA-SVM)â€”Automated Classification of Foot Drop Rehabilitation Case Study. Biosensors, 2019, 9, 114.	2.3	5

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55	Novel IoT-Based Privacy-Preserving Yoga Posture Recognition System Using Low-Resolution Infrared Sensors and Deep Learning. IEEE Internet of Things Journal, 2019, 6, 7192-7200.	5.5	72
56	Motor Control System for Adaptation of Healthy Individuals and Recovery of Poststroke Patients: A Case Study on Muscle Synergies. Neural Plasticity, 2019, 2019, 1-13.	1.0	10
57	Emerging Cognitive Intervention Technologies to Meet the Needs of an Aging Population: A Systematic Review. Frontiers in Aging Neuroscience, 2019, 11, 291.	1.7	26
58	A Framework for Home-Based Stroke Rehabilitation Using Interactive Games and Augmented Reality Feedback. Biosystems and Biorobotics, 2019, , 252-255.	0.2	4
59	Feasibility of Submaximal Force Control Training for Robot-Mediated Therapy After Stroke. Biosystems and Biorobotics, 2019, , 256-260.	0.2	1
60	Influence of bimanual exercise on muscle activation in post-stroke patients. ROBOMECH Journal, 2019, 6, .	0.9	7
61	Exoskeletons With Virtual Reality, Augmented Reality, and Gamification for Stroke Patients's™ Rehabilitation: Systematic Review. JMIR Rehabilitation and Assistive Technologies, 2019, 6, e12010.	1.1	78
62	Upper Limb Recovery Prediction After Stroke Rehabilitation Based on Regression Method. Biosystems and Biorobotics, 2019, , 380-384.	0.2	0
63	Effect of Physical Therapy on Muscle Synergy Structure During Standing-Up Motion of Hemiplegic Patients. IEEE Robotics and Automation Letters, 2018, 3, 2229-2236.	3.3	25
64	A Novel Approach to the Segmentation of sEMG Data Based on the Activation and Deactivation of Muscle Synergies During Movement. IEEE Robotics and Automation Letters, 2018, 3, 1972-1977.	3.3	12
65	Generation of Human-Like Movement from Symbolized Information. Frontiers in Neurorobotics, 2018, 12, 43.	1.6	10
66	Grasp-training Robot to Activate Neural Control Loop for Reflex and Experimental Verification. , 2018, , .		5
67	Unobtrusive Activity Recognition of Elderly People Living Alone Using Anonymous Binary Sensors and DCNN. IEEE Journal of Biomedical and Health Informatics, 2018, 23, 1-1.	3.9	73
68	Analyze the Human Movements to Help CNS to Shape the Synergy using CNMF and Pattern Recognition. Procedia Computer Science, 2017, 105, 170-176.	1.2	1
69	A wearable robotics assistive device: Design, technical solutions, and implementation. , 2017, , .		8
70	Avatar based interaction therapy: A potential therapeutic approach for children with Autism. , 2017, , .		9
71	DCNN-based elderly activity recognition using binary sensors. , 2017, , .		19
72	Muscle Synergies Indices to Quantify the Skilled Behavior in Human. Biosystems and Biorobotics, 2017, , 959-963.	0.2	1

#	ARTICLE	IF	CITATIONS
73	Sensory synergy: Modeling the neural dynamics of environmental feedback to the central nervous system. , 2015, , .		0
74	Tacit Learning for Emergence of Task-Related Behaviour through Signal Accumulation. Advances in Intelligent Systems and Computing, 2015, , 31-38.	0.5	1
75	Muscle synergy stability and human balance maintenance. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 129.	2.4	38
76	Muscle Synergy Features in Behavior Adaptation and Recovery. Biosystems and Biorobotics, 2014, , 245-253.	0.2	2
77	Sensory synergy as environmental input integration. Frontiers in Neuroscience, 2014, 8, 436.	1.4	28
78	The functional role of automatic body response in shaping voluntary actions based on muscle synergy theory. , 2013, , .		1
79	The hierarchical and functional connectivity of higher-order cognitive mechanisms: neurorobotic model to investigate the stability and flexibility of working memory. Frontiers in Neurorobotics, 2013, 7, 2.	1.6	27
80	Muscle synergy space: learning model to create an optimal muscle synergy. Frontiers in Computational Neuroscience, 2013, 7, 136.	1.2	39
81	Formulating a Cognitive Branching Task by MTRNN: A Robotic Neuroscience Experiments to Simulate the PFC and Its Neighboring Regions. , 2013, , 267-273.		2
82	A Tree-Type Memory Formation by Sensorimotor Feedback: A Possible Approach to the Development of Robotic Cognition. Intelligent Control and Automation, 2013, 04, 154-165.	1.0	0
83	A bio-inspired neuromuscular model to simulate the neuro-sensorimotor basis for postural-reflex-response in humans. , 2012, , .		3
84	Lateral balance supporting device for postural reflex ambulatory experiments. , 2012, , .		0
85	Static and dynamic memory to simulate higher-order cognitive tasks. , 2012, , .		1
86	Artificial balancer “ Supporting device for postural reflex. Gait and Posture, 2012, 35, 316-321.	0.6	16
87	HCBPM: An Idea toward a Social Learning Environment for Humanoid Robot. Journal of Robotics, 2010, 2010, 1-13.	0.6	0
88	A Hierarchical Autonomous Robot Controller for Learning and Memory: Adaptation in a Dynamic Environment. Adaptive Behavior, 2009, 17, 179-196.	1.1	7
89	A Novel Hierarchical Constructive BackPropagation with Memory for Teaching a Robot the Names of Things. Lecture Notes in Computer Science, 2009, , 451-459.	1.0	0
90	Vision-Motor Abstraction toward Robot Cognition. Lecture Notes in Computer Science, 2009, , 65-74.	1.0	1

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91	A New Dynamic Edge Detection toward Better Human-Robot Interaction. Lecture Notes in Computer Science, 2009, , 44-52.	1.0	1
92	Adapting Real Mobile Robots to Complex Environments Using a Pattern Association Network Controller (PAN-C). Journal of Advanced Computational Intelligence and Intelligent Informatics, 2009, 13, 312-319.	0.5	1
93	A Spiking Neural Network with dynamic memory for a real autonomous mobile robot in dynamic environment. , 2008, , .		15
94	A Simple Aplysia-Like Spiking Neural Network to Generate Adaptive Behavior in Autonomous Robots. Adaptive Behavior, 2008, 16, 306-324.	1.1	10
95	Sensor-fusion in spiking neural network that generates autonomous behavior in real mobile robot. , 2008, , .		7
96	Vision-sensorimotor abstraction and imagination towards exploring robot's inner world. , 2008, , .		3
97	Use-dependent Synaptic Connection Modification in SNN Generating Autonomous Behavior in a Khepera Mobile Robot. , 2006, , .		4
98	SELF-ORGANIZATION OF SPIKING NEURAL NETWORK THAT GENERATES AUTONOMOUS BEHAVIOR IN A REAL MOBILE ROBOT. International Journal of Neural Systems, 2006, 16, 229-239.	3.2	14
99	Self-Organization of Spiking Neural Network Generating Autonomous Behavior in a Miniature Mobile Robot. , 2006, , 255-260.		1