Arash Arami

List of Publications by Year
in descending order

48 papers	606 citations	759233 12 h-index	713466 21 g-index
49 all docs	49 docs citations	49 times ranked	590 citing authors

#	Article	IF	Citations
1	Improving activity recognition using a wearable barometric pressure sensor in mobility-impaired stroke patients. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 72.	4.6	64
2	Emotion on FPGA: Model driven approach. Expert Systems With Applications, 2009, 36, 7369-7378.	7.6	39
3	Real-time embedded emotional controller. Neural Computing and Applications, 2010, 19, 13-19.	5.6	36
4	Prediction of Gait Freezing in Parkinsonian Patients: A Binary Classification Augmented With Time Series Prediction. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1909-1919.	4.9	34
5	A Hidden Markov Model of the breaststroke swimming temporal phases using wearable inertial measurement units. , 2013, , .		31
6	Instrumented Knee Prosthesis for Force and Kinematics Measurements. IEEE Transactions on Automation Science and Engineering, 2013, 10, 615-624.	5.2	27
7	Nonlinear Dynamic Modeling of Blood Pressure Waveform: Towards an Accurate Cuffless Monitoring System. IEEE Sensors Journal, 2020, 20, 5368-5378.	4.7	25
8	An Accurate Wearable Foot Clearance Estimation System: Toward a Real-Time Measurement System. IEEE Sensors Journal, 2017, 17, 2542-2549.	4.7	23
9	Accurate Blood Pressure Estimation During Activities of Daily Living: A Wearable Cuffless Solution. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 2510-2520.	6.3	20
10	Effects of a neuromuscular controller on a powered ankle exoskeleton during human walking. , 2016, , .		19
11	Knee Implant Loosening Detection: A Vibration Analysis Investigation. Annals of Biomedical Engineering, 2018, 46, 97-107.	2.5	19
12	Online Reference Trajectory Adaptation: A Personalized Control Strategy for Lower Limb Exoskeletons. IEEE Robotics and Automation Letters, 2022, 7, 128-134.	5.1	17
13	Enclosed Electronic System for Force Measurements in Knee Implants. Sensors, 2014, 14, 15009-15021.	3.8	15
14	Quantitative Modeling of Spasticity for Clinical Assessment, Treatment and Rehabilitation. Sensors, 2020, 20, 5046.	3.8	15
15	Instrumented prosthesis for knee implants monitoring. , 2011, , .		14
16	Design and test of a MEMS strain-sensing device for monitoring artificial knee implants. Biomedical Microdevices, 2013, 15, 831-839.	2.8	14
17	Natural Walking With Musculoskeletal Models Using Deep Reinforcement Learning. IEEE Robotics and Automation Letters, 2021, 6, 4156-4162.	5.1	14
18	An Adaptive Assistance Controller to Optimize the Exoskeleton Contribution in Rehabilitation. Robotics, 2021, 10, 95.	3.5	13

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19	A patient-specific model of total knee arthroplasty to estimate patellar strain: A case study. Clinical Biomechanics, 2016, 32, 212-219.	1.2	12
20	Accurate internal–external rotation measurement in total knee prostheses: A magnetic solution. Journal of Biomechanics, 2012, 45, 2023-2027.	2.1	11
21	Accurate Measurement of Concurrent Flexion–Extension and Internal–External Rotations in Smart Knee Prostheses. IEEE Transactions on Biomedical Engineering, 2013, 60, 2504-2510.	4.2	11
22	The Influence of Posture, Applied Force and Perturbation Direction on Hip Joint Viscoelasticity. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1138-1145.	4.9	10
23	A Clustering-Based Approach to Identify Joint Impedance During Walking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1808-1816.	4.9	9
24	A fast model free intelligent controller based on fused emotions: A practical case implementation. , 2008, , .		8
25	Emotional control of inverted pendulum system: A soft switching from imitative to emotional learning. , 2009, , .		8
26	Reference-Free Automated Magnetic Sensor Calibration for Angle Estimation in Smart Knee Prostheses. IEEE Sensors Journal, 2014, 14, 1788-1796.	4.7	8
27	Imitative learning based emotional controller for unknown systems with unstable equilibrium. International Journal of Intelligent Computing and Cybernetics, 2010, 3, 334-359.	2.7	7
28	Locally Linear Neuro-Fuzzy Estimate of the Prosthetic Knee Angle and Its Validation in a Robotic Simulator. IEEE Sensors Journal, 2015, 15, 6271-6278.	4.7	7
29	Estimation of the Blood Pressure Waveform using Electrocardiography. , 2019, 2019, 7060-7063.		7
30	Virtual Energy Regulator: A Time-Independent Solution for Control of Lower Limb Exoskeletons. IEEE Robotics and Automation Letters, 2021, 6, 7699-7705.	5.1	7
31	A simple tool to measure spasticity in spinal cord injury subjects. , 2017, 2017, 1590-1596.		6
32	Cuffless Blood Pressure Estimation for Activities of Daily Living*. , 2020, 2020, 4441-4445.		6
33	Estimation of prosthetic knee angles via data fusion of implantable and wearable sensors. , 2013, , .		5
34	Data-driven prediction of forging outcome: Effect of preform shape on plastic strain in a magnesium alloy forging. Materials Today Communications, 2022, 31, 103210.	1.9	5
35	A fusion approach to improve accuracy and estimate uncertainty in cuffless blood pressure monitoring. Scientific Reports, 2022, 12, 7948.	3.3	5
36	Attention to multiple local critics in decision making and control. Expert Systems With Applications, 2010, 37, 6931-6941.	7.6	4

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37	Energy Expenditure Estimation Using Accelerometry and Heart Rate for Multiple Sclerosis and Healthy Older Adults. , 2014, , .		4
38	Cable-Driven Robotic Interface for Lower Limb Neuromechanics Identification. IEEE Transactions on Biomedical Engineering, 2021, 68, 461-469.	4.2	4
39	An Analog Front-End and ADC Integrated Circuit for Implantable Force and Orientation Measurements in Joint Prosthesis. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2013, , 295-302.	0.3	4
40	Multiple Heterogeneous Ant Colonies with Information Exchange. , 2008, , .		3
41	Physical activity recognition via minimal in-shoes force sensor configuration. , 2013, , .		3
42	Balance strategy in hoverboard control. Scientific Reports, 2022, 12, 4509.	3.3	3
43	Adaptive Reference Inverse Optimal Control for Natural Walking With Musculoskeletal Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 1567-1575.	4.9	3
44	Implantable and wearable measurement system for smart knee prosthesis. , 2014, , .		2
45	Smart instrumentation for determination of ligament stiffness and ligament balance in total knee arthroplasty. Medical Engineering and Physics, 2014, 36, 721-725.	1.7	2
46	Modelling Neuromuscular Function of SCI Patients in Balancing. Biosystems and Biorobotics, 2017, , 355-359.	0.3	1
47	A Robotic Glenohumeral Simulator for Investigating Prosthetic Implant Subluxation. Journal of Biomechanical Engineering, 2020, 142, .	1.3	1
48	A Clustering Method Based on Soft Learning of Model (Prototype) and Dissimilarity Metrics. Communications in Computer and Information Science, 2008, , 33-40.	0.5	0