

# Chenyun Dai

## List of Publications by Year in descending order

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Version: 2024-02-01

56  
papers

902  
citations

471061

17  
h-index

525886

27  
g-index

57  
all docs

57  
docs citations

57  
times ranked

472  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cancelable HD-SEMG Biometric Identification via Deep Feature Learning. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1782-1793.	3.9	12
2	Unsupervised Domain Adaptation by Statistics Alignment for Deep Sleep Staging Networks. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 205-216.	2.7	17
3	Myoelectric Control Performance of Two Degree of Freedom Hand-Wrist Prosthesis by Able-Bodied and Limb-Absent Subjects. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 893-904.	2.7	5
4	Epileptic Seizure Detection by Cascading Isolation Forest-Based Anomaly Screening and EasyEnsemble. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 915-924.	2.7	28
5	The Evaluation of Classifier Performance during Fitting Wrist and Finger Movement Task Based on Forearm HD-sEMG. Mathematical Problems in Engineering, 2022, 2022, 1-12.	0.6	0
6	Evaluation of decomposition parameters for high-density surface electromyogram using fast independent component analysis algorithm. Biomedical Signal Processing and Control, 2022, 75, 103615.	3.5	13
7	fNIRS-Based Dynamic Functional Connectivity Reveals the Innate Musical Sensing Brain Networks in Preterm Infants. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, , 1-1.	2.7	1
8	Optimization of HD-sEMG-Based Cross-Day Hand Gesture Classification by Optimal Feature Extraction and Data Augmentation. IEEE Transactions on Human-Machine Systems, 2022, 52, 1281-1291.	2.5	12
9	Measuring Neuromuscular Electrophysiological Activities to Decode HD-sEMG Biometrics for Cross-Application Discrepant Personal Identification With Unknown Identities. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-15.	2.4	11
10	Quantifying Spatial Activation Patterns of Motor Units in Finger Extensor Muscles. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 647-655.	3.9	7
11	Neuromuscular Password-Based User Authentication. IEEE Transactions on Industrial Informatics, 2021, 17, 2641-2652.	7.2	32
12	Flexible Electrodes-Based Smart Mattress for Monitoring Physiological Signals of Heart and Autonomic Nerves in a Non-Contact Way. IEEE Sensors Journal, 2021, 21, 6-15.	2.4	15
13	Cancelable HD-sEMG-Based Biometrics for Cross-Application Discrepant Personal Identification. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 1070-1079.	3.9	29
14	A review of wearable and unobtrusive sensing technologies for chronic disease management. Computers in Biology and Medicine, 2021, 129, 104163.	3.9	55
15	Generalized Finger Motion Classification Model Based on Motor Unit Voting. Motor Control, 2021, 25, 100-116.	0.3	3
16	Enhancing IoT Security via Cancelable HD-sEMG-Based Biometric Authentication Password, Encoded by Gesture. IEEE Internet of Things Journal, 2021, 8, 16535-16547.	5.5	33
17	Exploration of Human Activity Recognition Using a Single Sensor for Stroke Survivors and Able-Bodied People. Sensors, 2021, 21, 799.	2.1	18
18	Open Access Dataset, Toolbox and Benchmark Processing Results of High-Density Surface Electromyogram Recordings. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1035-1046.	2.7	44

#	ARTICLE	IF	CITATIONS
19	Simplified Optimal Estimation of Time-Varying Electromyogram Standard Deviation (EMG $\sigma$ ): Evaluation on Two Datasets. <i>Sensors</i> , 2021, 21, 5165.	2.1	5
20	Data Management for Transfer Learning Approaches to Elbow EMG-Torque Modeling. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 2592-2601.	2.5	20
21	Changes in synchronization of the motor unit in muscle fatigue condition during the dynamic and isometric contraction in the Biceps Brachii muscle. <i>Neuroscience Letters</i> , 2021, 761, 136101.	1.0	10
22	Evaluation of the Short-Term Music Therapy on Brain Functions of Preterm Infants Using Functional Near-Infrared Spectroscopy. <i>Frontiers in Neurology</i> , 2021, 12, 649340.	1.1	4
23	Finger Joint Angle Estimation Based on Motoneuron Discharge Activities. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 760-767.	3.9	62
24	Simplified Optimal Estimation of Time-Varying Electromyogram Standard Deviation (EMG $\sigma$ ). , 2020, 2020, 3122-3125.		1
25	A Review of Cerebral Hemodynamics During Sleep Using Near-Infrared Spectroscopy. <i>Frontiers in Neurology</i> , 2020, 11, 524009.	1.1	6
26	High-Density Surface Electromyogram-based Biometrics for Personal Identification. , 2020, 2020, 728-731.		13
27	Efficiently Training Two-DoF Hand-Wrist EMG-Force Models. , 2020, 2020, 369-373.		9
28	Tensor-based Uncorrelated Multilinear Discriminant Analysis for Epileptic Seizure Prediction. , 2020, 2020, 541-544.		1
29	Stochastic Modeling for Photoplethysmography Compression. , 2020, 2020, 5925-5928.		3
30	EMG-Force and EMG-Target Models During Force-Varying Bilateral Hand-Wrist Contraction in Able-Bodied and Limb-Absent Subjects. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2020, 28, 3040-3050.	2.7	10
31	Stochastic Modeling Based Nonlinear Bayesian Filtering for Photoplethysmography Denoising in Wearable Devices. <i>IEEE Transactions on Industrial Informatics</i> , 2020, 16, 7219-7230.	7.2	17
32	Cross-Comparison of EMG-to-Force Methods for Multi-DoF Finger Force Prediction Using One-DoF Training. <i>IEEE Access</i> , 2020, 8, 13958-13968.	2.6	22
33	EEG data augmentation: towards class imbalance problem in sleep staging tasks. <i>Journal of Neural Engineering</i> , 2020, 17, 056017.	1.8	34
34	Extracting and Classifying Spatial Muscle Activation Patterns in Forearm Flexor Muscles Using High-Density Electromyogram Recordings. <i>International Journal of Neural Systems</i> , 2019, 29, 1850025.	3.2	37
35	Achieving Neural Compatibility With Human Sensorimotor Control in Prosthetic and Therapeutic Devices. <i>IEEE Transactions on Medical Robotics and Bionics</i> , 2019, 1, 122-134.	2.1	16
36	Two degrees of freedom, dynamic, hand-wrist EMG-force using a minimum number of electrodes. <i>Journal of Electromyography and Kinesiology</i> , 2019, 47, 10-18.	0.7	21

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37	Independent component analysis based algorithms for high-density electromyogram decomposition: Systematic evaluation through simulation. <i>Computers in Biology and Medicine</i> , 2019, 109, 171-181.	3.9	31
38	Independent component analysis based algorithms for high-density electromyogram decomposition: Experimental evaluation of upper extremity muscles. <i>Computers in Biology and Medicine</i> , 2019, 108, 42-48.	3.9	29
39	Prediction of Individual Finger Forces Based on Decoded Motoneuron Activities. <i>Annals of Biomedical Engineering</i> , 2019, 47, 1357-1368.	1.3	34
40	Single-trial estimation of quasi-static EMG-to-joint-mechanical-impedance relationship over a range of joint torques. <i>Journal of Electromyography and Kinesiology</i> , 2019, 45, 18-25.	0.7	6
41	A Real-time EMG-controlled Functional Electrical Stimulation System for Mirror Therapy. , 2019, , .		8
42	New Channel Merging Methods for Multi-DoF Force Prediction of Finger Contractions. , 2019, , .		4
43	Optimal Estimation of EMG Standard Deviation (EMG $\sigma$ ) in Additive Measurement Noise: Model-Based Derivations and Their Implications. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2019, 27, 2328-2335.	2.7	10
44	Estimation of Finger Joint Angle Based on Neural Drive Extracted from High-Density Electromyography. , 2018, 2018, 4820-4823.		4
45	Characterizing Residual Muscle Properties in Lower Limb Amputees Using High Density EMG Decomposition: A Pilot Study. , 2018, 2018, 5974-5977.		7
46	Estimation of Muscle Force Based on Neural Drive in a Hemispheric Stroke Survivor. <i>Frontiers in Neurology</i> , 2018, 9, 187.	1.1	26
47	Two degrees of freedom quasi-static EMG-force at the wrist using a minimum number of electrodes. <i>Journal of Electromyography and Kinesiology</i> , 2017, 34, 24-36.	0.7	29
48	Comparison of Constant-Posture Force-Varying EMG-Force Dynamic Models About the Elbow. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 1529-1538.	2.7	37
49	Origins of Common Neural Inputs to Different Compartments of the Extensor Digitorum Communis Muscle. <i>Scientific Reports</i> , 2017, 7, 13960.	1.6	15
50	A new laparoscopic technique of inguinal ligament suspension for vaginal vault prolapse. <i>International Journal of Surgery</i> , 2017, 43, 131-136.	1.1	10
51	Altered Motor Unit Discharge Coherence in Paretic Muscles of Stroke Survivors. <i>Frontiers in Neurology</i> , 2017, 8, 202.	1.1	18
52	Laparoscopic Inguinal Ligament Suspension for Vaginal Vault Prolapse: Video Step-by-Step. <i>Journal of Laparoendoscopic &amp; Advanced Surgical Techniques Part B, Videoscopy</i> , 2017, 27, .	0.1	0
53	A pilot study assessing ipsilateral vs. contralateral feedback in EMG-force models of the wrist for upper-limb prosthesis control. , 2015, , .		0
54	Cross-Comparison of Three Electromyogram Decomposition Algorithms Assessed With Experimental and Simulated Data. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2015, 23, 32-40.	2.7	4

#	ARTICLE	IF	CITATIONS
55	Performance of three electromyogram decomposition algorithms as a function of signal to noise ratio: Assessment with experimental and simulated data. , 2014, , .		0
56	Cross-Comparison between Two Multi-channel EMG Decomposition Algorithms Assessed with Experimental and Simulated Data. , 2013, , .		3