Rosa H M Chan

List of Publications by Year
in descending order

95 papers	2,336 citations	279798 23 h-index	254184 43 g-index
97 all docs	97 docs citations	97 times ranked	2238 citing authors

#	Article	IF	Citations
1	The influence of running shoes on familiarization time for treadmill running biomechanics evaluation. Sports Biomechanics, 2023, 22, 459-472.	1.6	6
2	The CORSMAL Benchmark for the Prediction of the Properties of Containers. IEEE Access, 2022, 10, 41388-41402.	4.2	2
3	Biomechanical effects following footstrike pattern modification using wearable sensors. Journal of Science and Medicine in Sport, 2021, 24, 30-35.	1.3	6
4	Difference in the running biomechanics between preschoolers and adults. Brazilian Journal of Physical Therapy, 2021, 25, 162-167.	2.5	3
5	How do training experience and geographical origin of a runner affect running biomechanics?. Gait and Posture, 2021, 84, 209-214.	1.4	4
6	Latent Variable Models Reconstruct Diversity of Neuronal Response to Drifting Gratings in Murine Visual Cortex. IEEE Access, 2021, 9, 75741-75750.	4.2	0
7	VA2Mass: Towards the Fluid Filling Mass Estimation via Integration of Vision and Audio Learning. Lecture Notes in Computer Science, 2021, , 451-463.	1.3	8
8	An Efficient and Flexible Spike Train Model Via Empirical Bayes. IEEE Transactions on Signal Processing, 2021, 69, 3236-3251.	5.3	0
9	Hand Gesture Recognition Using Multiple Acoustic Measurements at Wrist. IEEE Transactions on Human-Machine Systems, 2021, 51, 56-62.	3.5	17
10	Sensor-Based Gait Retraining Lowers Knee Adduction Moment and Improves Symptoms in Patients with Knee Osteoarthritis: A Randomized Controlled Trial. Sensors, 2021, 21, 5596.	3.8	11
11	An inverted ankle joint orientation at foot strike could incite ankle inversion sprain: Comparison between injury and non-injured cutting motions of a tennis player. Foot, 2021, 48, 101853.	1.1	7
12	Evaluation of COVID-19 Restrictions on Distance Runners' Training Habits Using Wearable Trackers. Frontiers in Sports and Active Living, 2021, 3, 812214.	1.8	2
13	OpenLORIS-Object: A Robotic Vision Dataset and Benchmark for Lifelong Deep Learning. , 2020, , .		28
14	Are We Ready for Service Robots? The OpenLORIS-Scene Datasets for Lifelong SLAM. , 2020, , .		59
15	Classification of runnersâ€™ performance levels with concurrent prediction of biomechanical parameters using data from inertial measurement units. Journal of Biomechanics, 2020, 112, 110072.	2.1	18
16	Comparing biological and artificial vision systems: Network measures of functional connectivity. Neuroscience Letters, 2020, 739, 135407.	2.1	6
17	Plasticity of muscle synergies through fractionation and merging during development and training of human runners. Nature Communications, 2020, 11, 4356.	12.8	68
18	Real-Time Estimation of Knee Adduction Moment for Gait Retraining in Patients With Knee Osteoarthritis. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 888-894.	4.9	33

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19	Challenges in Task Incremental Learning for Assistive Robotics. IEEE Access, 2020, 8, 3434-3441.	4.2	12
20	The effects of midfoot strike gait retraining on impact loading and joint stiffness. Physical Therapy in Sport, 2020, 42, 139-145.	1.9	13
21	Multimodal hand gesture recognition using single IMU and acoustic measurements at wrist. PLoS ONE, 2020, 15, e0227039.	2.5	35
22	Modulating the Structure of Motor Variability for Skill Learning Through Specific Muscle Synergies in Elderlies and Young Adults. IEEE Open Journal of Engineering in Medicine and Biology, 2020, 1, 33-40.	2.3	16
23	Bilateral asymmetry of running gait in competitive, recreational and novice runners at different speeds. Human Movement Science, 2020, 71, 102600.	1.4	22
24	An investigation of in-ear sensing for motor task classification. Journal of Neural Engineering, 2020, 17, 066010.	3.5	3
25	Can runners maintain a newly learned gait pattern outside a laboratory environment following gait retraining?. Gait and Posture, 2019, 69, 8-12.	1.4	12
26	The biomechanical difference between running with traditional and 3D printed orthoses. Journal of Sports Sciences, 2019, 37, 2191-2197.	2.0	21
27	Neurophysiological Correlates of Gait Retraining With Real-Time Visual and Auditory Feedback. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1341-1349.	4.9	15
28	Cortical Hemodynamic Response and Connectivity Modulated by Sub-threshold High-Frequency Repetitive Transcranial Magnetic Stimulation. Frontiers in Human Neuroscience, 2019, 13, 90.	2.0	13
29	Effects of footwear midsole thickness on running biomechanics. Journal of Sports Sciences, 2019, 37, 1004-1010.	2.0	25
30	Volleyball Skill Assessment Using a Single Wearable Micro Inertial Measurement Unit at Wrist. IEEE Access, 2018, 6, 13758-13765.	4.2	57
31	Gait Retraining for the Reduction of Injury Occurrence in Novice Distance Runners: 1-Year Follow-up of a Randomized Controlled Trial. American Journal of Sports Medicine, 2018, 46, 388-395.	4.2	130
32	Control of impact loading during distracted running before and after gait retraining in runners. Journal of Sports Sciences, 2018, 36, 1497-1501.	2.0	19
33	Weighted Network Density Predicts Range of Latent Variable Model Accuracy. , 2018, 2018, 2414-2417.		2
34	Impact Loading During Distracted Running Before and After Auditory Gait Retraining. International Journal of Sports Medicine, 2018, 39, 1075-1080.	1.7	16
35	IoT for Next-Generation Racket Sports Training. IEEE Internet of Things Journal, 2018, 5, 4558-4566.	8.7	58
36	Identification of time-varying neural dynamics from spike train data using multiwavelet basis functions. Journal of Neuroscience Methods, 2017, 278, 46-56.	2.5	5

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37	Astrocytic l -Lactate Signaling Facilitates Amygdala-Anterior Cingulate Cortex Synchrony and Decision Making in Rats. Cell Reports, 2017, 21, 2407-2418.	6.4	45
38	Directionality indices: Testing information transfer with surrogate correction. Physical Review E, 2017, 96, 052220.	2.1	2
39	Entropy of surface EMG reflects object weight in grasp-and-lift task. , 2017, 2017, 2530-2533.		1
40	A wearable hand gesture recognition device based on acoustic measurements at wrist. , 2017, 2017, 4443-4446.		25
41	A Sparse Multiwavelet-Based Generalized Laguerreâ€"Volterra Model for Identifying Time-Varying Neural Dynamics from Spiking Activities. Entropy, 2017, 19, 425.	2.2	6
42	An evaluation of mental workload with frontal EEG. PLoS ONE, 2017, 12, e0174949.	2.5	138
43	Effective connectivity matrix for neural ensembles. , 2016, 2016, 1612-1615.		3
44	Computational classification of different wild-type zebrafish strains based on their variation in light-induced locomotor response. Computers in Biology and Medicine, 2016, 69, 1-9.	7.0	18
45	Impairment of decision making and disruption of synchrony between basolateral amygdala and anterior cingulate cortex in the maternally separated rat. Neurobiology of Learning and Memory, 2016, 136, 74-85.	1.9	22
46	Evaluating the Small-World-Ness of a Sampled Network: Functional Connectivity of Entorhinal-Hippocampal Circuitry. Scientific Reports, 2016, 6, 21468.	3.3	19
47	Cross-frequency information transfer from EEG to EMG in grasping. , 2016, 2016, 4531-4534.		9
48	Vagus Nerve Stimulation Alters Phase Synchrony of the Anterior Cingulate Cortex and Facilitates Decision Making in Rats. Scientific Reports, 2016, 6, 35135.	3.3	26
49	A framework for quantification and visualization of segmentation accuracy and variability in 3D lateral ventricle ultrasound images of preterm neonates. Medical Physics, 2015, 42, 6387-6405.	3.0	1
50	Reconstruction of neural network topology using spike train data: Small-world features of hippocampal network. , 2015, 2015, 2506-9.		3
51	Impairment of cognitive function by chemotherapy: association with the disruption of phase-locking and synchronization in anterior cingulate cortex. Molecular Brain, 2015, 8, 32.	2.6	33
52	Clustering Heterogeneous Data with k-Means by Mutual Information-Based Unsupervised Feature Transformation. Entropy, 2015, 17, 1535-1548.	2.2	22
53	Heterogeneous feature subset selection using mutual information-based feature transformation. Neurocomputing, 2015, 168, 706-718.	5.9	26
54	Naming Game on Networks: Let Everyone be Both Speaker and Hearer. Scientific Reports, 2015, 4, 6149.	3.3	15

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55	Identification of functional synaptic plasticity from spiking activities using nonlinear dynamical modeling. Journal of Neuroscience Methods, 2015, 244, 123-135.	2.5	17
56	Dimensionality reduction of hybrid data using mutual information-based unsupervised feature transformation: With application on intrusion detection. , 2015, , .		2
57	Laguerre-volterra model and architecture for MIMO system identification and output prediction. , 2014, 2014, 4539-42.		4
58	A High-Throughput Zebrafish Screening Method for Visual Mutants by Light-Induced Locomotor Response. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2014, 11, 693-701.	3.0	24
59	Compact Graph based Semi-Supervised Learning for Medical Diagnosis in Alzheimerâ€™s Disease. IEEE Signal Processing Letters, 2014, 21, 1192-1196.	3.6	24
60	Spectral modulation of frontal EEG during motor skill acquisition: A mobile EEG study. International Journal of Psychophysiology, 2014, 91, 16-21.	1.0	31
61	An FPGA based scalable architecture of a stochastic state point process filter (SSPPF) to track the nonlinear dynamics underlying neural spiking. Microelectronics Journal, 2014, 45, 690-701.	2.0	7
62	Evaluation of mental workload in visual-motor task: Spectral analysis of single-channel frontal EEG. , 2013, , .		12
63	Trace Ratio Linear Discriminant Analysis for Medical Diagnosis: A Case Study of Dementia. IEEE Signal Processing Letters, 2013, 20, 431-434.	3.6	18
64	On-Chip Systolic Networks for Real-Time Tracking of Pairwise Correlations Between Neurons in a Large-Scale Network. IEEE Transactions on Biomedical Engineering, 2013, 60, 198-202.	4.2	3
65	Identification of functional synaptic plasticity from ensemble spiking activities: A nonlinear dynamical modeling approach. , 2013, , .		2
66	Real-Time Prediction of Neuronal Population Spiking Activity Using FPGA. IEEE Transactions on Biomedical Circuits and Systems, 2013, 7, 489-498.	4.0	25
67	A reconfigurable architecture for real-time prediction of neural activity. , 2013, , .		2
68	Spectral modulation of frontal EEG activities during motor skill acquisition: task familiarity monitoring using single-channel EEG. , 2013, 2013, 5638-41.		6
69	Donor/recipient enhancement of memory in rat hippocampus. Frontiers in Systems Neuroscience, 2013, 7, 120.	2.5	53
70	High-Performance Computing for Neuroinformatics Using FPGA. , 2013, , 177-207.		0
71	Functional connectivity between Layer 2/3 and Layer 5 neurons in prefrontal cortex of nonhuman primates during a delayed match-to-sample task. , 2012, 2012, 2555-8.		8
72	Closing the Loop for Memory Prosthesis: Detecting the Role of Hippocampal Neural Ensembles Using Nonlinear Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 510-525.	4.9	24

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73	Role of the Hippocampus in Memory Formation : Restorative Encoding Memory Integration Neural Device As a Cognitive Neural Prosthesis. IEEE Pulse, 2012, 3, 17-22.	0.3	14
74	A dual mode FPGA design for the hippocampal prosthesis. , 2012, 2012, 4579-82.		3
75	A Hippocampal Cognitive Prosthesis: Multi-Input, Multi-Output Nonlinear Modeling and VLSI Implementation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 198-211.	4.9	156
76	A Nonlinear Model for Hippocampal Cognitive Prosthesis: Memory Facilitation by Hippocampal Ensemble Stimulation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 184-197.	4.9	63
77	High-Performance and Scalable System Architecture for the Real-Time Estimation of Generalized Laguerre-Volterra MIMO Model From Neural Population Spiking Activity. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2011, 1, 489-501.	3.6	17
78	Memory encoding in hippocampal ensembles is negatively influenced by cannabinoid CB1 receptors. Behavioural Pharmacology, 2011, 22, 335-346.	1.7	16
79	FPGA Architecture of Generalized Laguerre-Volterra MIMO Model for Neural Population Activities. , 2011, , .		1
80	Tracking the changes of hippocampal population nonlinear dynamics in rats learning a memory-dependent task. , 2011, 2011, 3326-9.		9
81	A hardware-based computational platform for Generalized Laguerre-Volterra MIMO model for neural activities. , 2011, 2011, 7282-5.		1
82	Estimation and statistical validation of event-invariant nonlinear dynamic models of hippocampal CA3-CA1 population activities. , 2011, 2011, 3330-3.		3
83	Cognitively Relevant Recoding in Hippocampus: Beneficial Feedback of Ensemble Codes in a Closed Loop Paradigm. Neuromethods, 2011, , 215-239.	0.3	8
84	The Neurobiological Basis of Cognition: Identification by Multi-Input, Multioutput Nonlinear Dynamic Modeling. Proceedings of the IEEE, 2010, 98, 356-374.	21.3	66
85	Changes of hippocampal CA3-CA1 population nonlinear dynamics across different training sessions in rats performing a memory-dependent task. , 2010, 2010, 5464-7.		6
86	Sparse generalized Laguerre-Volterra model of neural population dynamics. , 2009, 2009, 4555-8.		18
87	Nonstationary modeling of neural population dynamics. , 2009, 2009, 4559-62.		9
88	Nonlinear modeling of neural population dynamics for hippocampal prostheses. Neural Networks, 2009, 22, 1340-1351.	5.9	117
89	Tracking temporal evolution of nonlinear dynamics in hippocampus using time-varying volterra kernels. , 2008, 2008, 4996-9.		18
90	Statistical Selection of Multiple-Input Multiple-Output Nonlinear Dynamic Models of Spike Train Transformation. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4727-30.	0.5	12

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91	Nonlinear Dynamic Modeling of Spike Train Transformations for Hippocampal-Cortical Prostheses. IEEE Transactions on Biomedical Engineering, 2007, 54, 1053-1066.	4.2	175
92	Physiologically Plausible Stochastic Nonlinear Kernel Models of Spike Train to Spike Train Transformation. , 2006, 2006, 6129-32.		8
93	Physiologically Plausible Stochastic Nonlinear Kernel Models of Spike Train to Spike Train Transformation. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
94	Dielectrophoretic Batch Fabrication of Bundled Carbon Nanotube Thermal Sensors. IEEE Nanotechnology Magazine, 2004, 3, 395-403.	2.0	108
95	Rapid assembly of carbon nanotubes for nanosensing by dielectrophoretic force. Nanotechnology, 2004, 15, S672-S677.	2.6	79